

OVERSEAS NEWS

Italy fears revival of terrorism

BY ALAN FRIEDMAN IN MILAN

THIS MORNING, as funeral ceremonies begin in Bologna for the 15 killed in Sunday evening's terrorist bombing of the Naples-Milan Express Train 904, Italy remains stunned by the carnage and by fears that it could be a harbinger of the rampant terrorism of the 1970s...

Car sales in W. Europe drop 2%

BY KENNETH GOODING, MOTOR INDUSTRY CORRESPONDENT

CAR SALES in Western Europe fell by about 2 per cent in 1984, from 10,267m in 1983 to just over 10m, according to Ford of Europe estimates...

Tikhonov signs two trade pacts with Turkey

By David Barchard in Ankara

MR NIKOLAI TIKHONOV, Soviet Union Prime Minister, yesterday signed two trade pacts with Turkey during a six-day visit to the country...

Shultz warns Israel over terms for economic aid

BY OUR TEL AVIV CORRESPONDENT

THE ISRAELI Government, struggling with serious economic difficulties, has been bluntly warned by the U.S. that it must take tougher action if it wishes to receive desperately needed American economic aid...

Knesset restricts Kahane's movements

By Our Tel Aviv Correspondent

THE ISRAELI Knesset (parliament) has decided to restrict the movements of its most controversial member, Rabbi Meir Kahane, the anti-Arab extremist...

Egyptian exchange rate system overhauled again

BY TONY WALKER IN CAIRO

EGYPT IS again overhauling its exchange rate system in an effort to eradicate black market trading in its currency and ensure an adequate supply of dollars for private and public sector imports...

Arafat meets Hussein on Middle East peace moves

BY ROGER MATTHEWS

MR YASSIR ARAFAT, chairman of the Palestine Liberation Organisation, was due to leave Amman last night after two long sessions of talks with King Hussein of Jordan on possible Middle East peace moves...

Nimeiri sacks his finance minister

By Our Cairo Correspondent

SUDAN'S President, Gen Jaafar Nimeiri, whose administration is facing serious economic problems and a rebellion in the south of the country, has sacked a number of key officials including the finance minister...

DKB ECONOMIC REPORT December 1984: Vol. 13, No. 12 Declining interest rates are expected to spur domestic demand in Japan. Includes text and a line graph showing trends in Yen quotations and interest rates.

Recent Trends in Yen Quotations, Gaps in Japanese and U.S. Interest Rates and Basic Account. Includes a line graph and detailed economic analysis.

Zia plans an Islamic democracy

BY MOHAMMED AFTAB IN ISLAMABAD

PAKISTAN'S President, Gen Zia ul-Haq, plans to hold general elections to establish an Islamic democracy in Pakistan by March 25, 1985, after winning a five-year term for himself and endorsement of his Islamisation policies in last Wednesday's referendum...

KOREA EXCHANGE BANK US\$50,000,000 Floating Rate Notes due 1993. Includes details about interest rates and agent bank Lloyds Bank International.

Kuwaitis to sell lead-free petrol in Europe

By Maurice Samuelson
KUWAIT Petroleum International, which last year took over 1,500 Gulf Oil service stations in Europe, is to start selling unleaded petrol at 30...

End of Indian controls urged

INDIA'S import substitution policies and strict industrial controls have outlived their usefulness, Mr Abid Hussain, the Commerce Secretary, said yesterday...

Oman dam contract

THE SHAND Group, based at Hatfield in Derbyshire, has won a firm contract to build dams in the Gulf state of Oman, to prevent floods and to conserve water during flash rains...

Airbus and Pan Am sign leasing deal for aircraft

BY MICHAEL DONNE, AEROSPACE CORRESPONDENT

AIRBUS Industrie, the European airliner manufacturing group, and Pan American World Airways have now signed an interim lease agreement enabling 12 A-300B4 and four A-310 wide-body Airbus to be delivered to the airline...

The first phase of this complex contract arrangement has now been settled, with the interim lease agreement. Four A-300B-4s have been delivered to New York and put into service...

president and chief executive of Airbus, said the transaction was "complex, entirely financed from commercial sources, and finalised in the shortest time-frame."

Libor with a premium for 13 years. A number of major banks throughout Europe are believed to have been involved in the total package. Speed of delivery has been possible because some of the A-300B-4 aircraft are "white-tails" — aircraft already built but lacking immediate buyers...

contract for the first 12 A-310-300s, for delivery from 1986, and the 16 150-seater A-320s for delivery from 1988 or 1989, depending on a choice of engine. Financing of the options on the other 13 A-310-300s and 34 A-320s will come later...

It is not yet settled whether Pan Am will relinquish any of the leased aircraft on taking delivery of its firmly ordered Airbus. It may find the biggest A-300B-4s so useful that it will wish to retain at least some.

Australian steel action provokes South Korea

By Steven B. Butler in Seoul

THE POHANG Iron and Steel Company (Poco), South Korea's principal steel producer, has retaliated against Australia's lifting of preferential tariff treatment for Korean steel by sealing back its planned 1985 purchases of Australian coal and iron ore.

The conflict raises an issue that goes beyond the immediate dispute over steel duties. More and more countries are beginning to see South Korea not as a developing country that needs preferential treatment, but as an industrial power that can compete on equal terms with other developed nations.

The import cut of 150,000 tons of iron ore and 100,000 tons of coking coal is small compared with the company's purchases from Australia of 4.8m tons of iron ore and 2.85m tons of coking coal a year.

The Koreans have long asked the Australians to do more to correct a trade imbalance that in 1983 ran three to one in Australia's favour on a total bilateral trade of \$1.3m.

The Australian Government allowed Korean steel to be imported on a developing-country-preference basis with the understanding that South Korea would sell only within an allowed quota. Poco, however, sold an equal amount outside the quota, paying ordinary duties on the steel.

Jail terms for computer theft in Taiwan

BY ROBERT KING IN TAIPEI

A TAIWAN appeals court has sentenced the heads of six computer companies to six months each in prison for counterfeiting. The sentences may be offset however by a provision of Taiwan law that allows convicted persons under some circumstances to convert jail terms of six months or less to fines at the rate of roughly 23 cents a day.

Upon appeal, however, the computer software is still not covered by Taiwan's copyright laws and that Apple's registration of its ROM code had no legal force. They also argued that the circuitry containing the offending software had been made by other firms, among them a Government investment, and that they were being unfairly singled out.

Ireland hopes for microchip investment

BY BRENDAN KEENAN IN DUBLIN

IRELAND'S Industrial Development Authority is said to be confident of securing two major U.S. electronics projects for the country. Advanced Micro Devices (AMD) and Mostek are both said to be planning to locate microchip manufacturing plants near Dublin.

Meanwhile, a leading Hong Kong clothing company, the Fong group, is to invest £4 in a major manufacturing plant in North Dublin to produce a range of clothes. The project, which is being grant-aided by the IDA will create 1,000 jobs in the next two years.

U.S. changes rules on textile imports

WASHINGTON — The U.S. Commerce Department is to begin limiting the amount of certain textile and clothing products that can enter the country each month, with effect from January 1.

Under the new rules, monthly imports of specified products including some categories of cotton, wool and artificial fibres will be limited to 20 per cent of their annual quota each month. The monthly limit will apply to products that reached their quota in the previous year and which may cause market disruption if allowed uncontrolled entry.

Under present rules, goods are forbidden entry into the U.S. for the balance of the year once imports reach their full-year quotas. At the start of the next year, the import ban is lifted. Theoretically the full quota can be shipped in one month disrupting the market and cutting prices sharply.

Why West Germany can ignore its patent exchange deficit

AT FIRST GLANCE the syllogism looks impeccable. West Germany runs a substantial deficit in its international exchanges of patents and licences. Such know-how constitutes a touchstone of a country's industrial sophistication. Therefore, the position of West Germany at the technological forefront is in danger.

But syllogisms have a habit of being spoiled by false premises. And so it may well be in this case too, if the implications of a comprehensive study on patent flows between the major industrial nations compiled by the German Economic Institute (IWI) are anything to go by.

Rupert Cornwell reports from Bonn on a study by the German Economic Institute on patent flows between leading industrial nations. cover only technical and industrial know-how. They exclude such items as trademarks and copyrights, areas where the country is strong.

But perhaps the most significant finding of the IW study is the strong correlation which exists between capital flows and patent exchanges. As is suggested in the case of Germany, a trading giant but a patent dwarf, patents have little to do with success or otherwise in physical commerce.

down of disbursements for patents mirrors that for foreign investment in West Germany. The U.S. accounts for 42 per cent of investment, and 56 per cent of patent outgoings, Switzerland 14 and 17 per cent respectively, the Netherlands 9 per cent and 11 per cent.

distance by the electronics and data-processing industry. Of course none of this fundamentally changes the broader picture, that only Japan is a bigger net importer of patents than West Germany. But the fact, for example, that Britain is the only major European economy to show a patents surplus may have as much to do with the huge foreign holdings of British industry as with Anglo-Saxon inventiveness.

German industry also seems to be relatively unworried. A recent survey by the German Chamber of Commerce and Industry of 14,000 companies found a majority of them more than happy with their technology. A quarter of them reckoned they were world leaders in their sectors, and only 10 per cent felt there was any significant catching-up to be done.

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UK NEWS

Power stations to cut oil use despite coal strike

BY MAURICE SAMUELSON AND BRIAN GROOM

SO MUCH COAL has been reaching power stations that the electricity industry is preparing to reduce the amount of oil it has been burning to conserve its stocks of coal.

That decision, made known to Mr Peter Walker, Energy Secretary, by Sir Walter Marshall, chairman of the Central Electricity Generating Board (CEGB), is the strongest evidence to date that electricity supplies are remaining immune to the miners' strike.

It comes as Mr Arthur Scargill, president of the National Union of Mineworkers (NUM), gave a warning that "the Government had better understand that if they do not want the dispute to go on until Christmas 1985 they must allow the coal board to negotiate with the NUM."

Since March 23, three weeks after the strike began, the CEGB has been officially committed to maximising its oil burn, regardless of the huge additional bill that will somehow have to be met when the strike is over.

It has done that so successfully that it is confident that even if the weather suddenly becomes bitterly cold there will be no national power blackouts, or a need for power rationing like that introduced in the three-day working week of 1974.

The CEGB said last night "We are reviewing the situation the whole time. Obviously, the amount of oil we are burning is directly related to the amount of coal we receive."

The first result of the new policy is believed to have occurred this week, when the low demand for electricity on Christmas Day and yesterday enabled the CEGB to make less use of its large oil-fired stations on the Thames and the south coast of England and proportionately more from the coal-fired power stations near the Nottinghamshire coal field, where most miners are working.

Jaguar expects that at least a quarter of its 350 dealers in continental Europe will give up the franchise in the immediate future because they will be unwilling or unable to meet the higher standards of sales and service demanded. By the end of next year, only about half of the existing dealers are likely to remain.

Jaguar will not be giving any "golden handshakes" to departing dealers as it has in the U.S., where a similar reorganisation was started earlier this year. In the U.S. the 30 dealers (out of 186) asked to quit were offered \$5,000 for each car they would have been allocated in the 1984-85 sales year. Some have not agreed to the terms and litigation is pending.

The changes Jaguar is making in Europe are the final stages of a scheme to separate its distribution system from that of Austin Rover, its former stakeholder within the state-owned BL group. From next month the two companies will split their import-distribution business everywhere except in Portugal.

Jaguar has already revamped and strengthened its dealer networks in the UK. Earlier this year it started a strategic thrust into West Germany, home of its main rivals in the luxury car market.

Jaguar Deutschland began operations in January with a capital of DM 6m (about £1.6m), 35 per cent supplied by Jaguar and the majority by the Emil Frey group of Switzerland. The new company immediately served notice on 50 dealers and estimated it would have to dismiss 60 of the remaining 90. Those who stayed on performed so well that 1984 Jaguar car sales were about 2,000 compared with 1,300 last year.

Mr Johnson says Jaguar aims to capture 10 per cent of the West German luxury car market by 1990.

Jaguar in European dealer shake-up

By Kenneth Gooding, Motor Industry Correspondent

JAGUAR will start 1985 with a shake-up of its European distribution system outside the UK which is intended to increase its luxury car sales in continental Europe from about 4,000 to 10,000 by the end of the decade.

The company, which was sold back to the private sector by BL last August, has appointed new importers in Belgium, Luxembourg, Ireland, France, the Netherlands, Italy and Spain which will between them invest up to £10m in Jaguar's future.

Non-Opec producers 'to meet 2% rise in Western demand'

BY ANDREW GOWERS

OIL DEMAND in the Western world is likely to average 47.1m barrels a day (b/d) between now and next June, an increase of nearly 2 per cent over the estimated average this year.

All the increased demand, however, is likely to be met by increased production from the UK and other non-Opec sellers of oil, according to stockbrokers Grieve & Grant. They estimate that average output from producers outside Opec including net exports from the Communist bloc, is likely to increase to 27.8m b/d by next June from 27.1m b/d at the beginning of October 1984.

In its latest Opec comment, Grieve & Grant estimates that oil companies are currently unloading

stocks at a rate of 3m b/d, possibly bringing the free world's oil stocks down to the equivalent of 70 days' supply.

It suggests that de-stocking may be on the increase, as a result of relatively high government stocks and the ready availability of oil on the spot market.

The analysis says decisions by the British Government in coming weeks will be crucial to the oil market, and emphasises that the UK authorities need to clarify their position.

Among options open to the Government, it says, are:

- Retreating from the market and letting the industry determine the price. That, the report says, would result almost certainly in a significant deterioration in relations between the UK and many Opec members.
- Scrapping the British National Oil Corporation (BNOC) and fixing prices directly with the big North Sea oil companies, which might lead to even more volatile spot market prices.
- Imposing production controls. Grieve & Grant favours that option, although it acknowledges that it would be opposed by oil companies and would entail a significant change in government policy.

There is one overwhelming factor behind the need for production restraint - the failure of the UK in recent years to replace proven reserves at current rates of output," it says.

Other sectors that will benefit by more than the average include clothing and footwear, and wines and spirits, Staniland Hall says.

British Airways to increase Concorde use

By Michael Donne

CONCORDE is proving increasingly popular and profitable for British Airways (BA) and the airline is planning to use the aircraft more during the coming year.

An extension of scheduled services is under study, although no early decisions are likely. One possibility is that when BA takes over the South American network from British Caledonian in April, a resumption of Concorde services to Rio de Janeiro and Caracas may become possible.

Air France used to fly Concorde to both destinations from Paris, but suspended them for lack of traffic.

Concorde charters will be substantially increased next year. Already 185 charter contracts are booked and that is expected to rise. Over the past year, 170 charter contracts were fulfilled, although at the beginning of the year only 100 had been planned.

The charters vary widely, from a few hours around the Bay of Biscay for clubs and other organisations to flights across the world. One charter on Christmas Day went to Lapland. Among organisations making regular use of Concorde is Cunard.

The airline declines to give precise figures for Concorde revenue, but it is believed to be well over £12m a year and that the aircraft generates profits.

Rise in spending 'main impetus for growth'

BY PHILIP STEPHENS

CONSUMER SPENDING will provide the main impetus of economic growth next year, rising by about 3 per cent in real terms compared to 1984, according to independent forecaster Staniland Hall.


The projected increase, which would follow growth of 2.3 per cent this year, will be fuelled by the continued buoyancy of real incomes and an expected end to the miners' strike, the company says in its latest review of spending patterns.

It predicts that the spending will be spread broadly throughout the

different consumer sectors, with the strongest growth coming in sales of cars and electrical goods.

Spending on cars, which fell by an estimated 5 per cent in 1984 after the surge last year, is forecast to rise by 6 per cent in 1985, while outlays on electrical goods are expected to continue to grow by about 5 per cent.

Other sectors that will benefit by more than the average include clothing and footwear, and wines and spirits, Staniland Hall says.



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The annual financial statements of GFC International Finance N.V. and its parent, General Foods Corporation, for the fiscal year ended March 31, 1984, are available for inspection at the offices of the various Rating Agencies during normal business hours.

Copies of these statements may be procured by written request to:
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250 North Street, B.A. 7N
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Attention: Alan M. Shaver, Esq.
Corporate Secretary

Dated: December 27, 1984
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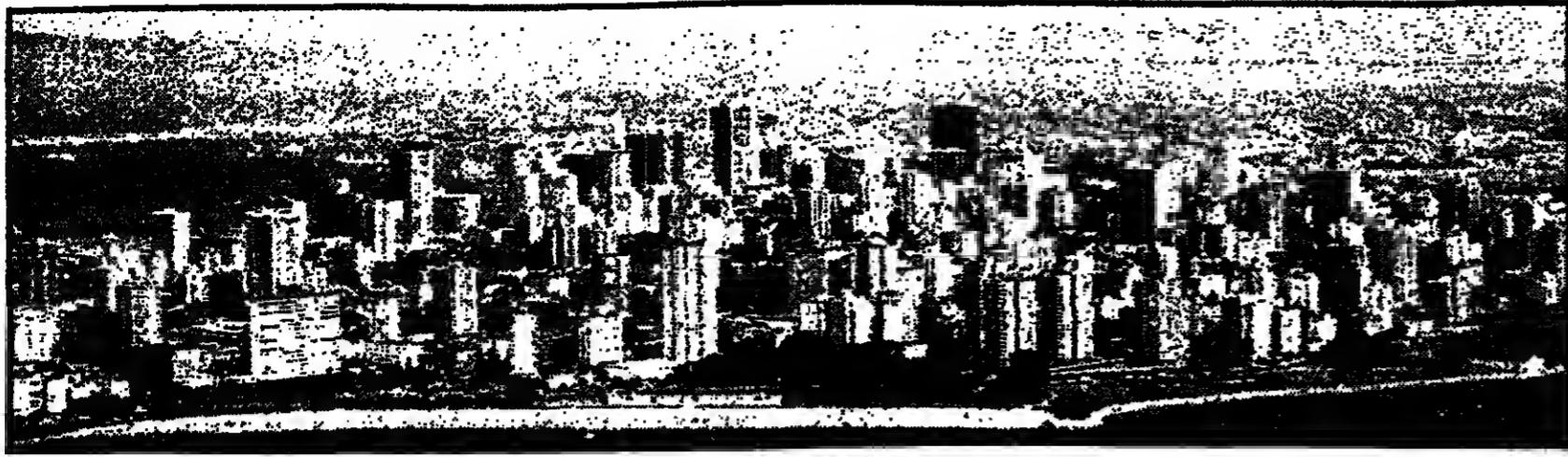
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The Vancouver skyline

Bernard Simon on development activity in Canada's most western province

Vancouver: A city poised for recovery

VANCOUVER property developers appear to be defying the laws of supply and demand. At a time when one in every five offices in the city stands vacant, and landlords are offering prospective tenants up to six months free rent plus furnishing, new office construction is at record levels.

But the Canadian, British and Far East investors putting up the lower blocks may turn out to be ahead of the game.

They have chosen to locate their products in a corner of North America untouched by the economic recovery of the past two years, taking advantage of plentiful materials, keen competition among suppliers and usually moderate labour costs. In addition, the new buildings may be ready for occupation just as the economy of western Canada begins to catch up with the rest of the continent again.

Some observers already believe that the clouds of gloom which have enveloped British Columbia, Canada's most westerly province, are about to lift. Mr James Matkin, president of the local Business Council representing BC's employers, argues that "things have to get really bad before they get better. In British Columbia's history, we're right at that mark."

Low commodity prices, labour strife and a harsh austerity programme imposed by the provincial government have ravaged business and consumer confidence for the past three years. While the rest of North America has basked in an economic recovery, British Columbia has suffered negative real growth for two years out of three, with a meagre advance of 1.5 per cent in 1983. Unemployment remains close to 15 per cent.

The Vancouver Food Bank, formed in late 1982 to provide groceries to needy families, this month raised the number of parcels it distributes from 2,500 to 3,000 a week. A long line of recipients queuing outside the city's Anglican cathedral each Wednesday morning is a stark contrast to the gleaming office blocks and hotels around them.

British Columbia can probably claim the poorest labour relations record in North America. Stoppages in the past 12 months alone have shut pulp and paper mills — the backbone of the economy — for 10 weeks, halted Vancouver's bus services

for most of the summer and kept the city's main daily newspaper off the streets for a month.

The economic slump is mainly the result of depressed prices for lumber and mineral products which make up the bulk of the province's exports. Exports in turn account for over a quarter of total output.

British Columbia forest products companies have lost an estimated C\$1.5bn (£354m) in the past three years, while the mining industry has suffered losses of close to C\$400m. Fifteen mines have closed, and Japanese steel mills are keen to renegotiate prices and volumes with the large new steel producers in north-eastern BC.

Hard-line policies of the right-wing provincial government headed by Mr Bill Bennett have further dampened economic activity and fanned trade union anger. Espousing a policy of short-term pain for long-term gain, the Government has cut education, health and social services, laying off several thousand civil servants. Initially supported by employers, Mr Bennett has more recently antagonised business by imposing a number of hefty tax increases.

Macmillan Bloedel, Canada's biggest forest products group, warned in its latest quarterly report that high wage rates, taxes and logging costs in British Columbia have put it in a position "that cannot be sustained if the company and the entire integrated coastal forest products industry are to remain competitive in the international marketplace."

Macmillan Bloedel and others have responded by diversifying outside the province. Another Vancouver-based group, Finning Tractor, has bought two of Caterpillar's three dealerships in Britain during the past 18 months.

The best hope for British Columbia in the short term would be stronger commodity prices. But even in the absence of a minerals and foreign products boom, a number of initiatives are under way which may have a significant bearing on the future of western Canada, and BC in particular.

Canada's new federal government, headed by Mr Brian Mulroney, is reopening the controversial issue of free trade between Canada and the U.S. The world's two biggest trading

partners. No one yet knows whether, when or how a recent series of talks between Ottawa and Washington on free trade in four specific sectors (including urban transit equipment and special steel) will be expanded. But public opinion throughout Canada appears to favour some broadening of these discussions.

Freer trade between the two countries is the spur that British Columbia needs to diversify its economy. For example, in spite of vast timber resources, a furniture industry has so far failed to materialise. Conversely, local businessmen think that a relaxation of Canadian curbs may encourage an influx of foreign financial institutions of Vancouver.

One big obstacle to the federal government negotiating better access for western Canadian products to the U.S. market is the effect of reciprocal concessions that would have to be made to American manufacturers upon the industrialised provinces of Ontario and Quebec. Jealousies between Canada's 10 provinces arising from their divergent economic interests are among the factors which have thwarted progress towards trade liberalisation in the past.

Within British Columbia, the provincial government has begun to recognise that initiatives are needed if the province is to attract investment and capitalise on the window to the Far East which it shares with the west coast states. Mr Bennett said in an interview that his main priority now is "to broaden the economic base in the areas of manufacture and exports. Our economy can only be built on exports."

South-east Asia has already displaced Europe as western Canada's main trading partner. Besides Japanese investment in the north-eastern BC coal mines, Far East interests are increasingly active in the Vancouver property market. Hong Kong investors earlier this year bought the province's largest shopping mall in suburban Vancouver.

Mr Bennett, who has himself visited Japan and China in the past year, has instructed his ministers to step up their foreign travel in a bid to generate trade and investment. In addition, the provincial government is working on what Mr Bennett calls an "industrial encouragement package" to

revive business confidence and attract more secondary industry. The plan, likely to be unveiled next February, will probably include tax cuts. If the province can persuade Ottawa to agree, it will also set up Canada's first duty-free processing zones.

To make zones even more attractive to business, the Bennett Government has hit on the idea of exempting them indefinitely from collective bargaining legislation, thus insulating them from BC's high labour costs and heavily unionised workforce.

The plan has infuriated trade unionists, but there is little they can do to stop it. The recession has severely weakened and divided the union movement. Membership of the International Woodworkers of America in British Columbia has plunged by almost 30 per cent since the onset of the recession, several of the new projects in downtown Vancouver are being built with non-union labour — one way in which the developers are able to hold down construction costs.

A deep split has opened up between moderate private sec-

tor unions whose members are hardest hit by redundancies and wage cuts, and more militant public sector groups like teachers.

In spite of the rash of stoppages in key sectors of the provincial economy this year, there are signs that industrial unrest is abating. A planned lock-out of railway workers, which would have crippled coal and lumber exports, was averted at the last minute earlier this month. The most noteworthy event organised recently by Operation Solidarity — formed last year to fight the Bennett government's presentation policies — has been a picnic.

The question is how long a truce on labour front will last. Political loyalties are more sharply defined with a higher ideological content in British Columbia than anywhere else in Canada. A senior official of the International Woodworkers warns that when the province's economy turns up again, unions will waste no opportunity to get even with the Bennett government and big business.

Japan looks to Expo '85 to save planners' dream

Richard Tomkins tells of a sea of mud destined to become a city of steel and glass

THE BODY of New Orleans' bankrupt Expo '84 may not yet be cold, but already the countdown has begun to the opening next spring of the 1985 world's fair in Tsukuba, Japan.

Out of a 250-acre sea of mud 55 miles north-east of Tokyo a futuristic mini-city of steel and glass, computers and robots, screen images an space rides, is beginning to emerge. Japan is investing Y570bn (£1.9bn) in the venture, much of which will never be recouped. The Government will regard the money as well spent, however, if the exposition succeeds in injecting new life into Tsukuba Science City, an artificial town designed to be the scientific capital of Japan, but which has yet to live up to the planners' dreams.

Tsukuba Expo '85 will be essentially a science fair, but aims to present technology with a human face. It goes by the subtitle "Dwellings and Surroundings: Science and Technology for Man at Home."

It will open on March 17 for six months and the organisers are hoping for 20m visitors with, perhaps, 5 per cent of them coming from overseas. Among the attractions will be Sony's Jumbotron, the world's largest, television set with a screen the size of four tennis courts; the Fuyo robot theatre, where visitors will be invited to play games with the robots; a giant tomato tree bearing about 10,000 tomatoes, which will be grown by guiding sunlight into its pavilion through optical fibres; and the world's largest ferris wheel, taking passengers to the height of a 25-storey building.

The stated aim of Expo '85 is to allow different nations to share the science and technology associated with their different cultures and to examine how scientific progress can be adapted to the environment and enrich people's lives. Its origins, however, lie in a

more practical question: how to revitalise Tsukuba Science City, a new town in a no-man's-land that has never really taken off. Tsukuba (pronounced "tsu-bu") was born in 1963 out of Japan's fears that its industrial and technological successes could fizzle out unless more was put into basic research. "High on innovation, low on innovation" was the common criticism of Japan and the government wanted to counter it.

The result, Tsukuba Science City, was an attempt to gather the country's top researchers together in an atmosphere where creative ideas might blossom, and simultaneously to promote decentralisation from overcrowded Tokyo.

Most of the country's research establishments have been transferred to Tsukuba—about 50 are there now—and a university has been built. The new academic core of the city is surrounded by six older towns and villages whose presence is intended to balance the specialised centre.

Whatever contribution Tsukuba may have made to Japan's research capability, it has not proved popular to live in. The core of the city was designed to hold 100,000 residents by 1990: it is still less than a third of the way there.

For such a bold investment in the future of Japan, Tsukuba has been singularly lacking in impact. An Expo official said that probably 90 per cent of people in Japan had never heard of the science city and the 10 per cent

who had would not know where it was.

The Government hopes sitting Expo '85 at Tsukuba will give the city the shot in the arm it so badly needs. Among the spin-offs from which it stands to gain are national and international publicity, new hotels, restaurants and roads, and an expressway to Tokyo.

One of the biggest obstacles to the development of Tsukuba—and one of the main difficulties which the Expo organisers have to face—is the city's inaccessibility. The nearest railway station is more than half-an-hour's drive away and up till now there has been no direct road link with Tokyo.

To cope with the expected influx of visitors to the fair a temporary railway station 8 miles from Tsukuba is under construction and fleets of buses will connect it with the Expo site. The Tokyo expressway is due to open by March.

The other main difficulty faced by the organisers is the lack of accommodation. They say that Expo visitors will need three days to see everything properly. However, by next spring there will still be only 22,000 hotel or guest house beds within 20 miles of Tsukuba and a large proportion of these will be taken up by site personnel.

The organisers have set their sights high in aiming for an attendance of 20m—a sixth of the population of Japan. Nevertheless, they naturally want to avoid an expensive flop and they are working hard to achieve their target with an intensive publicity campaign. If it succeeds, Tsukuba's resources of transport and accommodation are clearly going to be severely stretched.

As one observer put it, the two biggest problems which Tsukuba faces are first, that it won't attract enough people to the Expo, and second, that it will.

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THE ARTS

Television in 1984/Christopher Dunkley

A good year for ITV... but trouble for BBC

In television 1984 was the year of India and George Orwell, of Torvill and Dean, of Jesus doubters and incest, of the Olympic Games end all those other games — more game shows than ever before on British television. It was also the year which saw the deaths of five men, each with a unique sense of humour: Reggie Bosanquet, Tommy Cooper, Eric Morecombe, John Benjamin and Leonard Rossiter. Each continued importantly to television during its formative years and for this reason if no other the medium is never again likely to lose five people of such significance in such a short time.

To write the history of television it could be this which they see as the most significant aspect of 1984. Perhaps it was the influence of the new director-general, John Whitney, or perhaps the remarkable re-interpretation of the IBA's role to conform more closely to Thatcherite market philosophy. Maybe it was the realisation that eventually new technologies, by banishing rarity in television and radio channels, will make government appointed broadcasting "authorities" as anachronistic as printing authorities. Whatever the reason the IBA began to look more than ever like the friend of the commercial television companies and less than ever like the conventional champion of the viewers.



Peggy Ashcroft in "The Jewel in the Crown," the television event of the year, and George Cole and Dennis Waterman in "Minder," which worked right in the end



Admittedly on the only major occasion during the year when the IBA was obliged to take a hand in deciding whether two controversial programmes should be screened they did not come down on the side of permissiveness, but then these were programmes about trade unionism called *Questions of Leadership* made by Ken Loach and conveying the message that some trade union leaders stood well to the right of certain rank and file members. They have still not been broadcast.

Of many established actors and actresses from Peggy Ashcroft and Tim Pigott-Smith to Geraldine James and Zia Mohyeddin it also established Charles Dance, Art Malik and Susan Wooldridge who played Guy Perron, Hart Kumar and Daphne Manners) as big names almost overnight.

David Murray starts a series of reviews of the year's concerts by our music critics Calendar of riches which failed to produce a highlight

1984 wasn't a musical year that I shall remember, end yet it had a reel *embarras de richesses*. It simply happened to lack any memorable festival or cycle of concerts—within range of me, anyway—there would give it a mental date-stamp.

plano and chamber music and songs in the hostile acoustic of the Royal Opera, but staging *L'Heure espagnole* in the Festival Hall, was proof in *priori* that things had gone off the rails. The conductor David Atherton was brilliantly assured in *Varèse*, and gave us a *Daphne* of quite unexpected grace and rhythmic subtlety; but a Ravel "festival" should have explored the posthumous discoveries more assiduously, and shouldn't have included so many performances plainly inferior to what seasoned Ravelians can do.

Without any special musical theme, the Edinburgh Festival still had its moments; a pall was cast, however, by the miserable size of the audiences for major events. The Bath Festival, much more thoughtfully planned (in this chapter and verse on a whole), expects you to stay for longer than I could do: I heard tantalising snatches of its featured composer, György Kurtág, and magnificent Schubert by

Brendel and by the Endellion Quartet with Steven Isserlis. The amiable Spring Festival in Kurtág's home town, Budapest, was innocent of any serious planning at all, despite an abundance of musical talent.

with Jean-Philippe Collard was masterly; and the young Russian Mark Lubotsky made a comparable impact in Smith Square with a no less excellent pianist, Boris Berian. Recalling Berian's searching Shostakovich readings, I recall also the searing performance of the Sixth Symphony by Sanderling with the Philharmonia.

More pianists: Alicia de Larrocha found an exact rapport with Abbado in Mozart's C minor Concerto, and several other distinguished performers visited: Gilels in two grand appearances, Firkusny and Annie Fischer miraculously fresh, Alexeev and Bishop-Kovacevich radically different but equally committed in late Beethoven. Visiting with their new conductor Skowronecki, the Hallé Orchestra offered an elegantly light Beethoven Seventh that matched Masur's with the Royal Philharmonia; the all is evidently in top condition.

Arts Guide

Exhibitions

TOKYO
Ceramics of East and West (Idamitsu Art Gallery): This exhibition highlights 17th and 18th century fine ceramics in Japan and Europe, including Japanese Arita ware, Delft from Holland and Meissen from Germany. Particularly interesting is the influence of these various wares on each other, the result of trading of the period. Shards of Chinese and Japanese pottery excavated outside Cairo are also on display. This museum, on the 9th floor of the Kokusai Building in Hibiya, near Imperial and Palace Hotels, commands an excellent view over the Most and Emperor's Palace in the centre of Tokyo. A relaxed atmosphere enhanced by the serving of Japanese tea. Ends Feb 3.

Kandinsky's legacy of 700 drawings and sketches, his correspondence, his library and his own collection. The vast retrospective, the most important in Paris since 1963, retraces the different stages in his work from 1896 to 1944, and finally Paris. Centre Georges Pompidou, closed Tuesdays. Ends Jan 28. (277 1233).

LONDON
The Hayward Gallery: The Drawings and Sculptures of Mattioli. The Arts Council has brought together two major exhibitions, each of which deals with a major aspect of Mattioli's work. But though both are set out elsewhere, they are not to do so as one which makes their London showing an opportunity not to be missed. The entire sculptural oeuvre is shown, 69 bronzes in all (it goes on to Leeds in the New Year), for the first time in this country; and the selection of drawings represents the largest retrospective study ever to be seen in London or New York (it goes to the Museum of Modern Art in the spring of this year).

BRUSSELS
EBC exhibition on radio services and television including the French service and world service. Hotel de ville. Ends Jan 5.
The Written Word: Origin and Progress. Société Générale de Banque. Ends Jan 2.

NEW YORK
Museum of Modern Art: Primitivism in 20th Century Art has much good modern work by Picasso, Max Ernst, Braunschweig among many others as well as striking tribal objects from Asia, Africa and North America, but the theme itself seems

ment to fill space more than provide a better understanding of the primitives or the moderns. Ends Jan 15.
Van Gogh in Arles (Metropolitan): The first important exhibit to catalogue the artist's work in 1888-89 when Van Gogh was inspired by the South of France is covered in 144 works, including paintings, drawings and letters. Special bidding with special entry times reflects anticipated crowds of up to half a million. Ends Dec 30 (570 3970).

CHICAGO
Museum of Contemporary Art: Celebrating the foresight of local collectors, Dada and Surrealism in Chicago Collections includes more than 300 works by Dalí, Ernst, Magritte, Miró, de Chirico, in mixed media including sculpture and photographs as well as paintings and drawings. Ends Jan 27.

WASHINGTON
Hirshhorn: The entire third floor of the gallery will be filled with 157 works of painting, sculpture, constructions and installations done in the past decade by 147 artists in celebration of the museum's 10th anniversary. Ends Jan 6.

PARIS
The influence of French and Italian schools and fidelity to their national inspiration, the fascination with reality and romantic idealism, produced two contradictory tendencies in German painting in the second half of the 19th century. On the one hand, Arnold Böcklin, the symbolist continues to meditate and dream of poetry and mythology. On the other hand the violence of colours of the New Realists announces 20th Century Expressionism. Petit Palais, closed Mon, Ends Jan 13 (265 1474).

VIENNA
Fanny Elssler: This charming exhibition already shown in New York celebrates the dazzling career of the 19th century Viennese ballerina who died 100 years ago. Fanny Elss-

ler, daughter of Haydn's valet, took Europe and America by storm in the 1840s — and broke a few hearts on the way. Costumes, posters, letters and other memorabilia evoke a beautiful and talented woman. Opera House. Ends Dec 30.

WEST GERMANY
Cologne, Kunstverein, 1 Josef-Haus: Hot Works by Helmut Dorn, Lutz Fricke, Clemens Klotz, and Lieser, Mechthild Nemczek, Peter Teller and Claude Woll. Ends Jan 6.
Cologne, Museum für Ostasiatische Kunst, 100 Universitätsstrasse: The Museum of Far Eastern Art is showing Korean art, some of which is more than 5,000 years old. It includes storage jars, bronze and stone weapons, gold sheeting and ornaments, pearls, jade and glass, bronze figures and tombstones. Ends Jan 13.
Mannheim: Städtische Kunstgalerie, 9 Marktstrasse: a retrospective of Robert Häusser with 150 black and white photographs from between 1941 and 1964. Ends Jan 6.
Hannover: Glockengießerwall: Fifty-five paintings, water colours and gouaches by Edward Munch, the Norwegian painter (1863 to 1944). Ends Feb 2.
Hannover, Forum des Landesmuseums: 8th Ann. Marika Beritz Art between 1770 and 1830 has 200 bronzes, gypsum, ceramic and china sculptures by artists ranging from Gottfried Schadow to Georg Kolbe. Ends Feb 17.
Düsseldorf, Kunstverein and Kunst- und Grabbepeler: Russian and Soviet Art — Tradition and the Pres-

ent links the time of old Russian icon painting to today's contemporary approach with the help of 300 works of art. This is the most comprehensive show of Russian art presented in the Federal Republic. Ends Jan 27.
Mannheim, Villa Stuck, 60 Prinzregentenstrasse: 80 coloured drawings from between 1880 and 1917 by Gustav Klimt, the Austrian chief protagonist of Viennese Jugendstil. Ends Jan 27.

ITALY
Venice: Museo Correr. Drawings by Gian Antonio and Francesco Guardi: a delightful exhibition of 250 drawings by the brothers, including, among the subjects, the famous views of the city by Francesco. (Closed Tue). Ends Jan 31.
Rome, Palazzo di Carlo Magno. Raphael in the Vatican: the last in a series of exhibitions which have been held in Paris, Rome, Florence and Urbino, marking the 5th centenary of the painter's birth. The exhibition contains material from the secret archives, the Vatican Library and the Papal apartments, and is a wonderful chance to see objects not usually on public view, and the details of inaccessible frescoes. Until Jan 28.
Milan: Galleria Castaldini, Via Lanza 6. Drawings, watercolours and oils by Renato Guttuso. Until Dec 30.

NETHERLANDS
Amsterdam, Pieter Aertsen Museum: Similar But Different, an exhibition marking the archaeological museum's 30th anniversary, is devoted to daily life in Egypt, from 3500 BC to 600 AD. Not grandeur, then, but a study of the visitor is led through a series of small rooms (one a re-creation of an Egyptian interior) displaying everyday objects, del-

icate falience work, jewellery and religious artefacts. Richly illustrated catalogue. Ends Jan 1985. Concurrently on the top floor a remarkable display of the earliest photographs (1839-1860) of the monuments lining the Nile.
Amsterdam, Witte-Hoofthuisen Museum (Herengracht 60). Amsterdam silver 1520-1820 is an exhibition of 250 items and groups displaying the mastery of Amsterdam silversmiths over three centuries. The show, which focuses on church, guild and table silver, includes a magnificent monstrance of 1517, ornamented drinking horns and finely wrought chains of office used by the civic militia companies, and four salt cellars from 1530-1643 by the celebrated silversmith Johannes Lutma. Ends Jan 13, closed Mon.
Amsterdam, RembrandtHuis (Jodenbreestraat 6). Rembrandt as teacher. The intimate atmosphere of the house where Rembrandt lived and worked from 1639 to 1660 provides the setting for an exhibition of 75 drawings and etchings illustrating Rembrandt's teaching methods and the degree of influence he had over the future careers of his pupils, who included Ferdinand Bol, Gerrit Dou, Govert Flinck and Nicolaes Meeus. The show includes drawings with forewell corrections in the master's hand, finished compositions based directly on works by Rembrandt, and revealing instances of borrowings and outright plagiarism. An excellent, fully illustrated catalogue in Dutch and English guides the visitor through the scenes of 17th-century studio theory and practice. (Ends Jan 6).

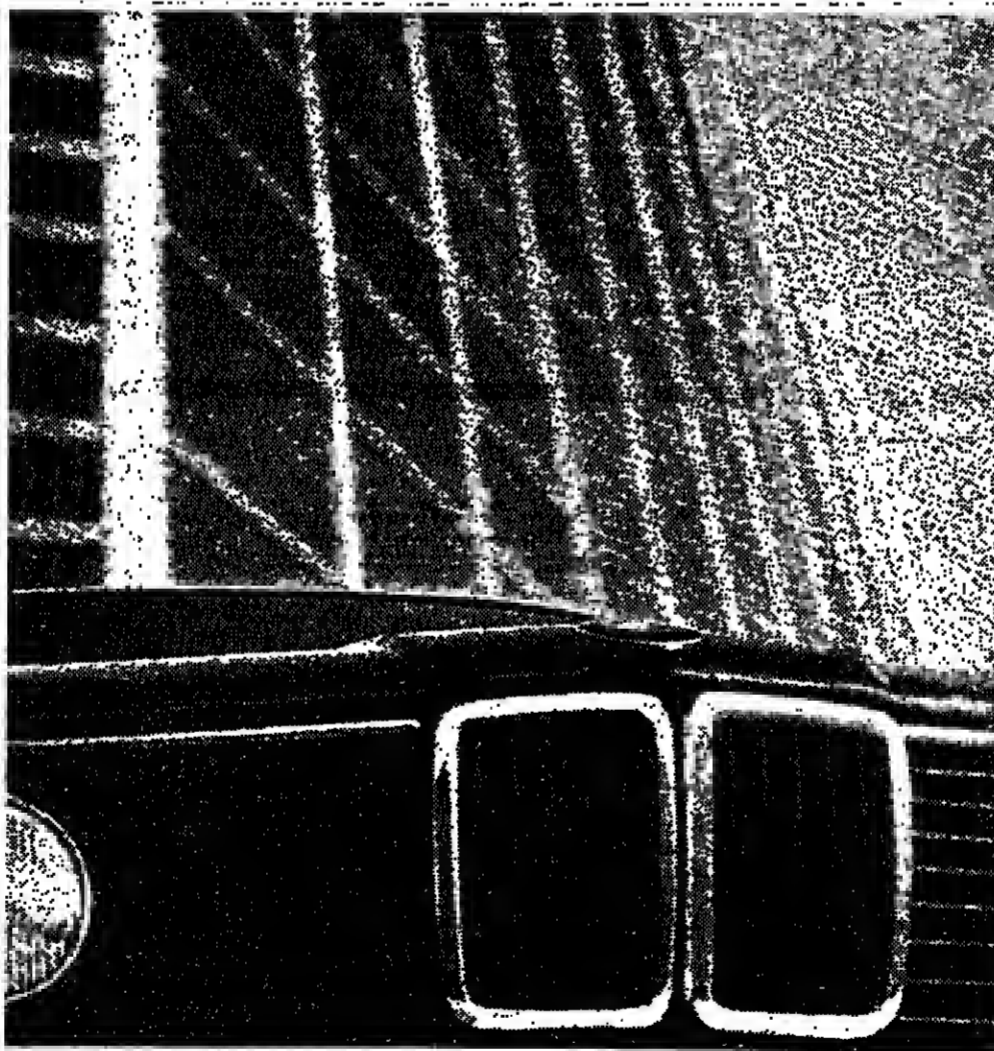
Which international movement was one of the most successful again in 1984?

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1984 was yet again a year of extraordinary success for BMW. Following many exceptional years, another one of significant growth. And this was achieved despite the setbacks created by the weeks' long strike in the Federal Republic. As the result of a singleminded and concerted effort in both the domestic and export markets, BMW succeeded in regaining much of the lost ground and, with a total of 430,000, succeeded in producing and selling more cars than in the previous year. At the same time, the company's turnover has risen yet again, to over 16 billion D-Marks. And 1,500 new jobs have been created, even though - for strike-related reasons - this didn't quite match forecasts.

The world's most demanding drivers profit by BMW. And BMW by them. BMW's positive results can be related, not least, to the enormous vote of confidence given by the large number of new buyers, who have felt that the particularly high demands they make on a car are best realised by BMW. By their decision to opt for the most advanced automotive technologies available, informed and discerning buyers have acknowledged their understanding of BMW's dedication to innovation. Because they have fully appreciated exactly what BMW means by exclusivity. Namely, status through progress, and not for its own sake.

Whoever decides on the car with the more advanced technology, acquires not only greater potential. But also demonstrates a fine appreciation for the signs of our times. As far back as 20 years ago, BMW had already started reacting to the fast-changing parameters of modern motoring - quite voluntarily, without any outside pressures or influences. That's because the belief in concentrating on essentials has always been a cornerstone of the BMW philosophy. And because we have always regarded pioneering technologies as the best possible basis for handling materials and energy more responsibly, and for preserving both our valuable resources and the environment.



That's why, for instance, BMW has always been committed to sensible engine capacities and cylinder numbers, which are in tune with the needs of their time. For years the BMW in-line, 6-cylinder engine has been regarded as the epitome of engine technology. And through the introduction of new, ultra-modern electronics, BMW has given this legendary concept even greater farsightedness and security for the future.

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Welcome 1985. In the coming years, BMW will continue to redouble its efforts with all its usual energy and vigour - to the benefit of everyone who, like us, believes in pushing progress to its limits. At the same time, we'd like to thank everybody - whether they be customers, suppliers or co-workers. And we wish you all in 1985, what you have helped us achieve in 1984: much success.

BMW AG, Munich



FINANCIAL TIMES

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Thursday December 27 1984

Arafat must choose

MR SHIMON PERES, the Prime Minister of Israel, travelled the short distance from Jerusalem to Bethlehem on Christmas Eve. It was a journey intended among other things to signal the freedom of worship which Israel allows in the emotionally-charged territories that it has occupied since the 1967 Arab-Israeli war.

It was also a reminder of the bitterness of the religious and nationalist conflicts which dominate all other issues in the land known to many Jews as Judea and Samaria, and to the Arabs as both Holy Land and Christian as the West Bank.

On Christmas Day 1977, the late President Sadat of Egypt met Mr Menahem Begin, then Israel's Prime Minister, at Ismailia in the Suez Canal. Mr Sadat's intention was to persuade Mr Begin to accept in one bold gesture the principle of a full exchange of occupied territory in return for a full peace between the two states.

The Egyptian President failed for several reasons, not least because he could not carry with him the other Arab partners to the conflict.

Framework

In this one respect, King Hussein of Jordan is now attempting to complete the process which Mr Sadat managed to achieve for Egypt alone.

The speech which the King delivered to the Palestine National Council in Amman on November 22 has laid down a framework which challenges the other Arab nations to accept the reality identified by Egypt seven years ago — that Israel will not be defeated militarily and only through negotiation can there be hope of self-determination for the 1.2m Palestinians living on the West Bank and Gaza.

The early months of the New Year are likely to be critical in deciding the Arab response to this, and in particular that of Mr Yasser Arafat and the Palestine Liberation Organisation.

King Hussein is adamant that the PLO and Mr Arafat are the legitimate voice of the Palestinians and that no-one else can speak for them. His present strategy is therefore heavily dependent on a positive Arafat reply to his suggestion that they should work together for a new joint initiative aimed at winning wider Arab support and leading eventually to an

Paralysis in planning

STRANGER, longer-running and in some respects more theatrical than any of the Benjamin Britten operas that were once staged in the same venue at the Maltings, Snape, the public inquiry into the wisdom of building a pressurised water reactor at Sizewell is just coming up to its second birthday. Optimists say that the closing stages are now far away. If so, then the Sizewell proceedings will have been laconic in comparison with the inquiry into the merits of expanding Stansted airport which has lasted for 24 years, and is in large measure going over the ground that has already been covered by an earlier inquiry.

The same unfortunate minister, Mr Nicholas Ridley, who has just been reported to the knuckles by backbenchers in the House of Commons because they suspected him of rushing to judgment in the Stansted decision, has recently determined the limits for an extension of the M40 from Oxford to Birmingham. The decision has been taken, that is, except for the very matter which has caused the delay so far, namely, exactly where a route can be found to avoid the unique, though perhaps not uniquely unique, wild-life habitats of Otmoor.

Least damage

Nor can anyone say there is anything particularly ditty about the planning process in the Otmoor affair, since the building of the same road over the Chilterns was held up for some 11 years by a dispute over which beech woods on Aston Hill could be cut down with least damage to the environment. Yet the decision-making process in all these cases looks almost perfunctory in comparison with the debate over another project on Mr Ridley's plate, the Channel Tunnel.

It would be grotesque to blame Mr Ridley for the present administration as a whole for the near-paralysis which grips Britain's system of government whenever major decisions on capital investment and infrastructure have to be taken. If anything, to the extent that the last Labour government was more sensitive

THE SEASON of straining

wastelines and low-flying shirt buttons is upon us once more. But this year, the chances are that your over-indulgence is causing an extra twinge of guilt.

For in 1984, the question of a healthy diet — or the lack of it — has impinged on public consciousness as never before. In 1985, the issue seems certain to affect Britains farming and food industries with even greater force.

The centrepiece for concern has been a slim but deadly study of diet and heart disease from a Government-appointed panel of scientists known evocatively as "The Coma report" (the name stands for Committee on Medical Aspects of food policy).

Its findings are alarming indeed:

- Coronary heart disease and cerebrovascular disease are the number one killers in Britain by a long way, accounting for 40 per cent of deaths in men and 38 per cent in women.
- Mortality from coronary heart disease is higher in the United Kingdom than in any other country except Finland and Ireland (although the rate in parts of the UK exceeds that in Ireland). What is more, deaths from this cause have been declining only slowly, while in several other countries — including Finland — they have fallen dramatically.
- In 1981, over 40 per cent of British middle-aged men and women were overweight — an increase resulting from declining physical activity and dietary changes.

Animal fat in the diet is singled out as a major culprit for heart disease and obesity. And while British people's total intake of energy has declined steadily since the 1950s, the proportion of that energy contributed by fat has climbed from about 27 per cent in 1950 to 43 per cent in 1982.

Coma recommends a cut in total fat intake of 17 per cent and reduction of about a quarter in consumption of saturated fat. It also advises a reduction in salt consumption, without giving figures, no increase in intake of sugar, and increased consumption of fibre-rich carbohydrates such as bread, cereals and potatoes.

These suggestions are less controversial than those in a previous report which received heavy publicity last year for proposing that consumption of saturated fat, salt and sugar should be halved.

Nonetheless, for farmers and food manufacturers, the result is something akin to a slow earthquake. It undermines some of the cornerstones of British agriculture, and calls in to question long-established food processes and preparations. Among products singled out as major sources of fat are a wide range of dairy items, meat and biscuits.

It is to be sure, the idea that saturated fat is bad for you is not new. Reports recommending dietary change along similar lines have been around since the late 1950s.

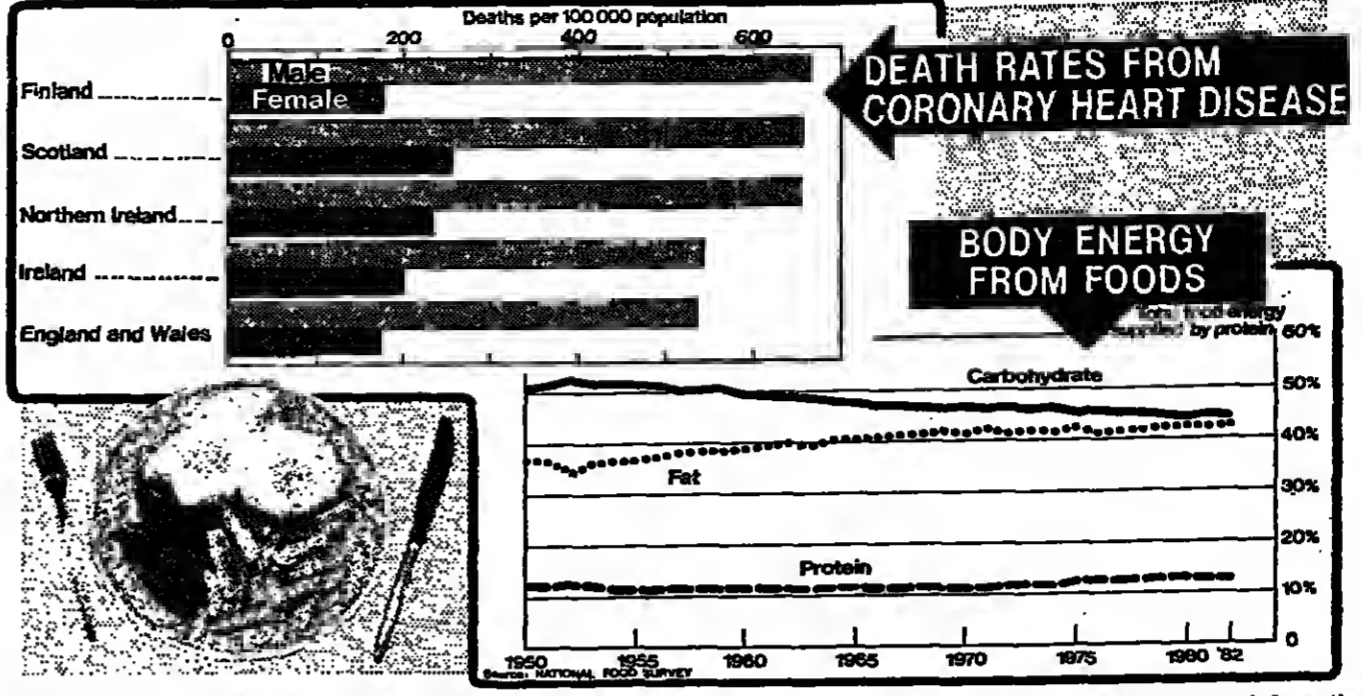
There have been increasing signs, too, in recent years that the message about fat is getting through to the public.

Consumption of butter — identified by the Coma report as a major problem — has been on the wane for more than a decade, declining from 400,000 tonnes in 1971 to 304,000 in 1982. Although part of the explanation

AFTER CHRISTMAS . . .

Britain inches towards a healthier diet

By Andrew Gowers



for this lies in price and competition from margarine, there is little doubt that the latter's ability to present itself as a "healthier" product, even if it is not, has also played an important role.

Red meat has fallen prey to a similar trend. The market research company Taylor Nelson reports that the British are eating 20 per cent less lamb and 19 per cent less beef than they did in 1980. Again, the reason is partly competition from cheaper meats such as pork and particularly poultry, but the latter's healthier image is an underlying factor.

That said, this year's food scare is different in two respects. For one thing, the Government — in accepting the recommendations of the Coma report — has committed itself for the first time to aiming for a specific reduction in fat intake. For another, the argument about diet seems more coherent and less divided than before.

Consumption of ordinary household milk has fallen more than 10 per cent since 1982. Sales of skimmed and semi-skimmed varieties, meanwhile, have rocketed from only 1 per cent of the total milk market in 1980 to 12 per cent now. This year alone, sales have trebled.

In clear-cut cases like this, consumers are obviously drawing their own conclusions and voting with their cheque-books. It also reflects the fact that the food industry are concerned, it is a trend which holds as many opportunities as threats — opportunities which can be exploited by skilful marketing.

"The stomach size in this

market, for example. Apart from catering for the trend in milk consumption, the dairy industry is responding to new tastes with low-fat cheeses, spreads of yogurt. The Walls meat company recently launched a lean sausage, and says it is "very pleased" with sales so far.

Significantly, that product is selling at a considerable premium over ordinary sausages, reflecting the fact that the trend towards healthier food is very much a middle-class phenomenon at present.

"The higher income can afford to choose their food a little more carefully," says Mr

will have access to information about the harmfulness of specific foods. Parts of the food industry, which is not renowned for its openness about what goes into its products, are very worried indeed.

What remains to be seen is how specific the labelling will be: in other words, whether labels will detail saturated fat content as well as fat in general. Naturally enough, the food processors are not keen to draw special attention to a substance which has already been branded by Government as a menace.

Companies in such groupings as the Dairy Trade Federation and the FME have been pushing for what they call "Big Four" labelling, specifying fat, protein, carbohydrate and energy content of foods — but omitting references to saturated fat. They also argue that different varieties pose considerable practical difficulties.

But the nutritionists and physicians, who have become a powerful lobby on this issue, are unmoved. Professor Philip Randle from Oxford University's clinical biochemistry department, who chaired the Coma panel, says his fellow-members would be "totally opposed" to such generalised labelling. "It would make a nonsense of the exercise if all that went on the label was total fat content," he said.

One point, though, on which everyone appears to agree is that urgent action is needed to clarify the issues.

"People are confused," says Dr Lesley Yeatman of the Consumers' Association. "The message is not clear, and more importantly, the message has changed. Consumers don't now know whether they're coming or going." She, for one, is concerned that the Ministry may actually be moving too fast on

Animal fat in the diet is singled out as a major culprit for heart disease

country is getting gradually smaller," says Mr David Helliard, head of marketing at the National Farmers' Union. "The industry will thus have to gear itself to sell more of less, and will seek to segment the market. The consumer is looking for variety, and if the producer is to keep up that's what he must provide."

Sir Jeremy Moore, director general of the Food Manufacturers' Federation, agrees: "In marketing terms, the industry has not really had the confidence actively to promote products on the basis that they're good for you. Coma has given them that confidence."

The signs of change are all around: the range of high-fibre products coming on to the

Ian Tottman, product manager at Walls. As Dr John Brown, secretary of the Health Education Council, points out, there is another reason: "Fatty products are cheap because fat is almost a throwaway product."

But things are not always as well-defined as this. On the one hand, consumers are not always able to make informed choices. On the other, messages from consumers do not always pass ungarbled to producers.

The Government's response to the Coma report has been to propose labelling foods for their fat content. Agriculture Ministry officials say fat labelling is an announcement is expected next month.

For the first time, consumers

● Premium payments to British beef and lamb producers, which can encourage farmers to produce excessively fatty animals.

● Official support buying of beef. Because criteria for this so-called "intervention buying" are not particularly discriminating, the meat industry tends to offer its less attractive, fatter carcasses.

● The dairy surplus. This Christmas, as on other occasions in the past, the EEC is distributing 200,000 tonnes of butter at subsidised prices to European consumers — a move which runs directly counter to the new-found concern about Britain's fatty diet.

In a way, this goes to the core of the problem. If consumers and by industry continues to decline — as it is almost universally expected to — it will throw the Community dairy surplus mountains into even starker relief.

This year's milk production cuts have fixed production more than 10 per cent above EEC demands, farmers are only too well aware that the gap could widen significantly in coming years.

A cultural clash of symbols

The Japanese have a well-deserved reputation for endurance. While the average Western family is already nursing its banger, letting out its belt and putting the Santa suit away for another year, the Japanese are still limbering up for the major annual celebration at New Year.

Christmas is a useful preliminary occasion on which to practise extreme conviviality, Japanese style: to call it a "dry run" would be quite wrong. Most offices remain open on Christmas Day, but many Tokyo "salarymen" do no doubt the seasonally cold weather, are unusually ruddy-faced from luncheon onward.

The season of good cheer is helped on its way by the payment, in mid-December, of the half-yearly wage bonuses which represent perhaps three months' salary for the average worker. This sudden surge of cash is generally recognised as the cause of the upturn in the Tokyo stock market at the end of each year. It also funds the gift-giving, with which family and professional relationships are cemented in Japan as well as at Midsummer.

Men and Matters

Rules for gift-giving are traditional and precise, with the size of the gift varying according to the closeness and status of the recipient. The average Japanese middle-manager spends the equivalent of £1,000 a year on presents, each of which has an average value of £10-£15.

If Christmas cheer is easily assimilated into Japanese office parties and department store sales promotions, it can still sometimes gain or lose a little in translation. One Tokyo television channel ran as its seasonal treat this week a film, innocuously titled "Merry Christmas, Mr Lawrence," which is in fact a particularly harrowing account of life in a Japanese prisoner-of-war camp. And Simon Smithson, of brokers Grieverson Grant, reports seeing festive decorations in a Tokyo department store with a centrepiece of Santa Claus — crucified.

New Year's daze

It is not that the Japanese have anything against 1984 — it has, if anything, been a better-than-usual year for town and country alike, with the stock market hitting a record high and the farmers bringing in the best rice crop for five years. But "forget the year" parties are what the Japanese call their year-end office celebrations. The general objective is to wipe the slate clean with generous quantities of liquor in preparation for whatever, besides a hangerover, 1985 may bring.

With a night out on the town liable to cost £100 or more per head at Tokyo's livelier night-spots, "forget the year" parties may have accounted for a sizeable chunk of the ¥3.5 trillion (about £12bn) which Japanese companies spent on "corporate entertainment" in 1983.

The figure will certainly be higher this year. The rate of expenditure, averaging over

All in vein

Whether it is a fad or a longer-term fashion, the idea of blood-typing as a social denominator has been gaining popular ground in Japan this year. Job advertisements sometimes specify a preferred blood-type for applicants.

A confectionery company last month brought out a line of bubble-gum which was distinguished, not just by its cranberry yoghurt flavour, but by its packaging into four varieties, one for each major blood group — A, B, O and AB.

Asahi Breweries, one of Japan's major drinks companies, purports to have found a link between blood-type and drinking habits. "A" groupers usually prefer bars with an intimate atmosphere; "B" groupers will drink anywhere; "O" groupers are "open and easy," while "AB" groupers are "cool," says Asahi, basing its findings on a survey of 1,464 drinkers. It is not known whether Dracula was among them.



"In Japan, giving sterling as a company present is regarded as a great insult."

Observer

FAMOUS GROUSE
FINEST SCOTCH WHISKY

It's more than just the price that sets it apart.
Quality in an age of change.

UK BIOTECHNOLOGY

Why industry is taking more notice

By David Fishlock, Science Editor

THE DIRECTOR of a British government research laboratory recalls wryly how in 1979 he tried to interest a UK company in an original biotechnology idea.

But times change. A flurry of announcements this autumn suggest that Britain is becoming quite innovative—as well as much brisker about handling technology transfers from lab bench to industry.

Within recent weeks companies as well-known internationally as Grand Metropolitan, ICI, Air Products, Ciba-Geigy and Eli Lilly have all been associated with new British biotechnology ventures.

On the science side, several national laboratories with international names, such as the Rothamsted Experimental Station in Harpenden, the Plant Breeding Institute in Cambridge, and the Centre for Applied Microbiology and Research at Porton Down, have been linked with commercial biotechnology ventures.

Just before Christmas the Medical Research Council announced plans for a £1m scientific "showcase" at its 23 London laboratories, to facilitate closer ties with the drug and medical technology industries.

As a "creative broker" for technology transfer, the British Technology Group has been reborn with a clear mandate from government to bring commerce together with UK invention. Its present portfolio of inventions is strong in biotechnology.

BTG's chairman, Mr Colin Barker, has given assurances that BTG will not be trying to direct the national pattern of research but rather will be responding to the needs of the research community to find more sponsors for its ideas. It is building a data bank which he wants to use to match industry's needs with BTG's present portfolio of 1,800 inventions.

What may prove the most important feature of this data bank, however, is that, provided enough companies come in, it could be highly revealing about where British industry sees its own technological destiny.

While in limbo, uncertain what the government intended



Dr Peter Dean (left) and Dr Roger Gilmour of the Agricultural Genetics Company.

its future to be, BTG planned and launched a biotechnology start-up venture which seeks to exploit advanced British plant science. The Cambridge-based Agricultural Genetics Company was set up by its founders as the "country cousin" of Coltech, an earlier British biotechnology venture.

Coltech struck a deal with the Medical Research Council, giving the new venture first refusal to all its research in the new biotechnologies such as genetic engineering and monoclonal antibodies.

The Agricultural Genetics Company has negotiated similar rights to the new biotechnologies of six of the research centres of the Agricultural and Food Research Council. The commercial potential of such research at Rothamsted's use of microbes to control crop pests, the cocktails of microbes that can biodegrade straw, have drawn in such companies as Ultramar, Eli Lilly and Ciba-Geigy, as investors.

The new company is a conduit through which plant biotechnology will feed into these investor already established in agricultural chemicals. Its job is to pinpoint the promising science, pay for the development—probably in the same national laboratory—then for the technology transfer to production with a mini-

imum of fuss. Coltech, meanwhile, has firmly established the principle that an entrepreneurial venture can "milk" a research centre successfully for commercial ideas. In contrast to present plans of the country cousin, it set up its own laboratories from the start, and within a year had selected and transferred certain key biotechnologies from the medical scientists in Cambridge and elsewhere.

What proved more difficult was selling itself to potential customers. Coltech's investors are finance houses and institutions, not prospective customers.

The breakthrough came in 1983 when Boots the chemist entered into a joint venture with Coltech, to develop and market the first fruits of the Nobel prize-winning Cambridge discovery of monoclonal antibodies. Those first products will be new medical tests for diseases, and for conditions such as fertility and pregnancy.

For Boots, the joint venture is simply an investment, not a new source of the new products, says Mr David Gratton, its chief executive. Boots itself must compete with others to sell the new product.

But Mr Gratton sees it as a smart move. Boots, My view is that Boots has been quite bright to get into diagnostics in this way. It has

bought into an international centre of expertise for a very modest fee, about £2m. He expects the joint venture to be in the black by 1986.

He sees confirmation for his own confidence in recent approaches by ICI to head-hunt senior staff from Boots-Coltech, ICI, thwarted in an attempt earlier this year to negotiate a joint venture in plant biotechnology with the Swedish group Cardio, has just set up rcf Diagnostics, a new venture closely related to its pharmaceutical division and its primary interests in cancer and heart disease.

LH Engineering is part of a new biotechnology venture called Porton International, announced this summer as an unquoted private group based in London and Washington, backed by 15 institutional investors. Dr Tony Atkinson, director of CAMR's 80-strong microbial technology laboratory, says Porton International has established close—though by no means exclusive—links with CAMR over the past 18 months.

As Professor Sydney Brenner, director of the Laboratory of Molecular Biology in Cambridge and a key figure in the successful biotechnology transfer to Coltech, sees it, academics will fight shy of helping industry on a "phone-a-come" basis. But the biotechnology start-ups can spearhead technology transfer to industry, while the universities themselves are fashioning entirely new kinds of departments that will do for biotechnologies what the engineering departments now do for physics in technology transfer to industry.

According to Mr Brian Street, its chairman, Mr Street has taken a couple of years to build up the expertise it is buying by "low-cost entry" through

Apel, its joint venture with Coltech.

As Mr Gerard Fairtlough, Coltech's chief executive, sees it, "has shown that a small company can work well with a big one." He sees a vast potential for what he calls the "foamy bugs business" of exploiting large-scale industrial microbiology.

One of Britain's most powerful centres of expertise in industrial microbiology is the former Ministry of Defence laboratory specialising in "germ warfare" at Porton. It is world-famous in biotechnology circles for the "Porton pot," a bioreactor it invented in the 1950s. Since the 1st-1970s, this centre has been in the civil sector, as a public health laboratory called the Centre for Applied Microbiology and Research (CAMR). It has run pilot-plant operations for companies as disparate as Dupont and Biogen. With the help of funds, it is refurbishing its pilot plant with new bioreactors.

The government has bicon CAMR every encouragement to forge commercial connections. For example, in bioreactor design it works closely with a British company called LH Engineering.

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Such "gracious confirmation" however, was disallowed and it was not until 1986 that Great Britain had second thoughts and proceeded to proclaim sovereignty and dominion over the Penguin Islands which were then annexed to the

Undersea gem mining

Where diamonds are a gull's best friend

By Kenneth Marston, Mining Editor

THE PROSPECT of undersea diamonds has suddenly awakened interest in a dozen desolate little islands off the Namibian coast.

According to a Cape Town geologist, the Penguin Islands could be sitting among at least 2m carats of diamonds, worth about \$200m—and there could be considerably more.

Sea trials involving a coastal vessel, Calypso, are in progress, according to the latest report received by Monroa Resources, the Canadian company which holds a 5 per cent stake in Ocean Diamond Mining. If all goes well, the vessel could be recovering diamonds from the seabed any time now.

The venturers intend to start mining operations around the southernmost island, Pomona, where over 10,000 carats were recovered during 41 days in 1970.

Many a tale of high adventure, riches, disappointment and even sudden death can be told of the 400 miles of Namib Desert coastline that runs south from Walvis Bay through Namibia down to the Orange River.

When not brooding in the fogs that roll in from the South Atlantic, the arid coastline can be lashed by gales and blinding sandstorms. Until the 19th century it was just another desolate part of the world.

Then, a ship's master decided to take a look at one of the 12 tiny islands. He found the island to contain large deposits of guano, the droppings of sea birds which at that time fetched a good price as fertilizer.

Colony of the Cape of Good Hope. In 1910 they became part of South Africa and remain so.

There was a more exciting secret than guano waiting to be discovered on the nearby coast. It was the world's richest source of gem quality diamonds. The first diamond was picked up in 1908 by a railway worker, Zacharias Lewala, just south of Luderitz.

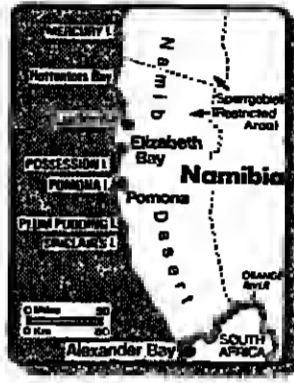
fnevitably, this triggered a diamond prospecting rush and within a few months the colonial administration of the area in what was then German South West Africa sealed off the region surrounding the finds. It was proclaimed a Sperrgebiet, "forbidden territory" to casual visitors. Small mining companies were formed and some £5m worth of diamonds was produced in the following six years.

Among the undeterred diamond-seekers in these waters is Ivan Prinsop, who for many years has been fascinated by the potential of alluvial mineral deposits. In 1978 he hired a fishing boat and a diver and recovered diamonds off Kleinzoo in Namaqualand. Further success attended his fledgling Dawn Diamond Company as it grew in stature with 30 boats at work, and this resulted in a prospecting rush to the area.

In 1982 Prinsop sold his stake in Dawn Diamonds and left Namaqualand to try his luck in the territorial waters surrounding the 12 "forgotten" guano islands. The holder of their mining leases, granted by the South African Government, is Eiland Diamante, an associate company of the Rembrandt tobacco group.

Eiland has granted Prinsop's private company, Ocean Diamond Mining, exclusive rights to mine the areas in return for royalty payments and a share of profits.

After knocking on many doors in search of finance, Prinsop has managed to interest the British merchant bank Baring Brothers and, with its assistance, has arranged initial financing of \$3.3m via a private placing of debentures and shares. Prinsop's advisers estimate that an average price of R150 per carat the operation should run at a profit if it can maintain a recovery rate of over 2,000 to 3,000 carats per month.



Skills will be needed

From the Secretary, Institution of Production Engineers.

Sir.—As we move into 1985, employment prospects for the year ahead look highly uncertain. Against this background it should be a matter for concern for all of us that too many of our young people, who are at this time in the year faced with important decisions relating to their futures, are in many areas still being actively discouraged from embarking upon careers in manufacturing industry.

It is certainly true that over the past six years the workforce in manufacturing industry has shrunk by about 30 per cent, and it is these sort of statistics that disguise the fact that there remains a chronic shortage of qualified, professional, production engineers.

Manufacturing industry today is in the midst of continuing technological revolution, the effects of which will be felt well into the 21st century. To manage these exciting new developments we need all the skills and intellect of our very brightest young people, both male and female.

We must encourage youth, and those responsible for their education, to recognise the tremendous potential that exists in production engineering offers. As stated recently by Mr John Butcher, Parliamentary Under Secretary of State for Industry, "Production engineers will become the industrial architects of the future."

Production engineering has lost its "bolder suit" image. Today our schools and universities need to be equipping young people, boys and girls, with the skills and knowledge which will enable them to become the managers of modern technology.

When Britain's offshore oil and gas revenues begin to decline, probably in the mid-1980s, the burden of national wealth creation through added value will again fall heavily upon manufacturing industry. Unless we act now the prospects for future generations will be bleak indeed.

R. J. Miskin, 66, Little Ealing Lane, W5.

Expansion at Heathrow

From Mr A. Lucking. Sir.—While Mr Fishers' article (December 14) is admirable, I believe that the inspector has come to the right answer, perhaps for the wrong reasons. The current 300,000-310,000 maximum number of air traffic movements can be increased by exploiting the emergent U.S. air traffic control technology, together with that evolved here.

Letters to the Editor

British air traffic controllers achieve more instrument landings per hour than Americans. But the Americans appear to be nearer to achieving instrument operations on close parallel and converging runways, for example, the Americans are using short, offset runways for the small aircraft, which have to be spaced widely from the jumbos, and so absorb a disproportionate amount of runway time. Steeper approach paths, and exploitation of the new microwave landing system are contributing also.

A more determined approach by all concerned would enable such commuter runways to be added at both Heathrow and Gatwick. And though the huge investment needed to build Stansted may appear to be freely available from passengers' pockets, in fact it is yet another example of the prodigal use of the nation's limited resource, which the much richer Americans have rejected. They have decided that technology is cheaper than new airports, and their existing real estate to the uttermost. We should do the same.

A. J. Lucking, 17, Broad Court, Bow Street, WC2.

The price of potatoes

From Mr J. Fuller. Sir.—I thank you for getting your cartoonist, Nick Carter, to produce such a delightful illustration for my letter (December 11). The smug grin on the face of the chemist holding the blue dye—I'm clever. I thought up this one—the broad toothy grin of the enthusiastic confident man from the advertising agency; plus potatoes everywhere. I'm sorry that Robin Pooley, chief executive of the Potato Marketing Board (December 12) was not amused.

Since, however, he is sitting on a potato mountain costing £20m which is gradually turning to a mushy heap, I suppose we must excuse his techniques.

What is not excusable is his inference that the British are privileged to have a PMB to guarantee adequate supplies for their voracious appetites. Eggs have not disappeared with the demise of the Eggs Marketing Board, and in the highly unlikely event that the British farmer failed to supply the market with sufficient potatoes, then I am sure the Dutch would gleefully make up the shortfall. They have an exportable surplus

this year of 1.5m tonnes and their transport costs would add 1p per lb, a sum which Mr Pooley's figures would more than enable the British farmer to compete.

Mr Pooley also admits that the PMB acts as the agent in a conspiracy, sided and abetted by the Government, to maintain a minimum price for potatoes. If we were dealing with industry this would be considered a cartel and be illegal, but because it comes under the heading of the "sacred cow" of agriculture it is called a "price support operation" and becomes legal. Only the morning of December 17, listening to the PMB daily report we bear, and I quote: "There is evidence producers are selling on open ticket and to unlicensed sources without authority. Both these practices are contrary to the Board's regulations and are having a weakening effect on the trade." Look out, you naughty farmers. Big Brother is watching you.

Fortunately for us—oppressed, exploited, non-farming members of the EEC—help would appear to be at hand. Should President Reagan and Mr Block, the U.S. Minister of Agriculture, be able to carry out their plans as outlined (December 14) then the cost to the Community of their agricultural policy will become even more astronomically expensive so that either they will have to make drastic reductions in the level of farm support or—dare we hope—abolish the Common Agricultural Policy altogether.

John H. Fuller, 15, Aberdour Road, Ilford, Essex.

Floating off in the City

From Mr R. Stewart. Sir.—When Mr Butcher suggests (December 13) that Stock Exchange member firms should have out of their corporate finance departments "eg to merchant banks," he seems to have failed to notice that most firms of stockbrokers with corporate finance departments will shortly be owned by merchant banks. It is arguable moreover, that a greater conflict than that between stockbrokers' corporate finance departments and broking functions exists and has always existed in the conflict between merchant banks' corporate finance and investment management functions.

One can see that there will

be economies in having the same institution dealing with both corporate finance (which is inevitably linked with underwriting and broking/dealing). All these operations benefit from a large capital base and can therefore support each other. Investment managers however, should not need large capital bases and their function involves conflicts with corporate finance, underwriting and broking. Should not Mr Butcher's suggestion be amended so that firms float off into an investment management functions?

Roger Stewart, Jesus College, Cambridge.

Imports of textiles

From the Chairman, Textile Industry Support Committee.

Sir.—Yet another academic is lecturing on the merits of the textile industry—this time Prof Silbertson argues (December 14) that our "protection" costs the UK consumer £500m per year.

This assertion is based on the premise that cheaper and more readily available imports mean cheaper goods in the shops but the High Streets are awash with boutiques full of imported clothing bought for pennies and sold for pounds.

It is the importer and the middleman who would benefit from the free-for-all the learned gentleman advocates and further unemployment would hit the most loyal and strife-free sector of British industry.

It would be a sorry day indeed if our largest retailer had to shandon its well tried policy of buying British because there were no suppliers left. John G. Bridge, 115 Windsor Road, Oldham.

Applauding at the opera

From Mr P. Shortleton.

Sir.—William Weaver (December 19) says in relation to the new production of La Traviata in Florence: "It is always a pleasure to see a packed house applauding and shouting with approbation." Yes, sir, but not, please, after an aria or in the middle of an act. The Continental habit of applauding the singers mid-stream can only be compared with clapping at the end of a symphony movement. Would-be applauders of the latter type are rightly frowned upon and silenced. And fortunately at Covent Garden the Continental habit has virtually died out.

Could the British not add to their services to humanity by influencing the great Continental opera houses against merchant banks' corporate finance and investment management functions. Patrick Shovelton, Long Morling, Down Lane, Front, Tunbridge Wells.

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BALLOT-RIGGING AND DEATHS DISRUPT ELECTION

Voting reopens in Indian polls

BY JOHN ELLIOTT IN NEW DELHI

POLLING IN India's general election reopens today amid allegations of ballot-rigging during the first stage of voting on Monday and after more than 20 people have died in violent clashes. One opposition leader has alleged that an attempt was made on his life.

A relatively high poll of 60 to 65 per cent was estimated for Monday's voting, which covered about two thirds of the country's 380m registered voters.

Mr Rajiv Gandhi's Congress (I) Party remained confident of a comfortable victory, even though it is usually assumed that a high poll favours the opposition.

Violence and ballot-rigging are commonplace in Indian elections, particularly in the northern Hindi belt where the state of Bihar is always a centre of trouble.

The ballot-rigging, usually involving what is known as booth capturing, is carried out relatively openly. On Monday it was watched by journalists and other observers both in Bihar and in the Uttar Pradesh town of Bahapat, where Mr Charan Singh, a veteran opposition leader who was briefly Prime Minister in 1979-80, faces a tough electoral battle.

Party activists, sometimes armed, take over a polling booth and mark ballot papers or choose who is allowed to vote. They steal ballot boxes when polling has closed. Politicians from most parties indulge in such activities both to gain votes and to disrupt the successes of their opponents. Often they divert attention from their own difficulties by alleging that an opponent is ballot-rigging and then insist on a re-poll.

As a result of such activities on Monday, polling is to be repeated today in nearly 200 polling booths, mostly in Bihar, one of the country's poorest states.

The alleged assassination attempt was reported by Mr Atal Behari Vajpayee, president of the Bharatiya Janata Party, who said he was handed a grenade in a bouquet of flowers. However, Mr Shrikant Verma, Congress (I) spokesman in New Delhi, said last night that the grenade had no detonator and was "harmless as a coconut". The allegations, he said, were a political stunt to gain sympathy for Mr Vajpayee.

Sikhs voted in large numbers on Monday, especially in Delhi. Several hundred paid one rupee each for a bus ride from their refugee camp to their polling station in Trilochpur, where their homes were

hunted by Hindus after the assassination of Mrs Indira Gandhi on October 31.

Most Sikhs are believed to have voted against Congress (I) because of the army attack on their Golden Temple at Amritsar in June and because of Mrs Gandhi's failure to solve disputes over the Punjab, their home state.

One of the first tasks facing the new Indian Government will be to try to resolve issues that lie behind the resentment between Sikhs and Hindus. Several thousand Sikhs fled from Delhi before Monday's polling in the Punjab and the adjacent desert state of Rajasthan, fearing further attacks from Hindus. No violence, however, was reported between Sikhs and Hindus in Delhi, where Sikh voters were escorted by police and volunteer workers in the poorest areas.

Merrill bid for Tokyo exchange seat fails

By Terry Povey in London

MERRILL LYNCH the world's leading securities brokerage house, has failed to become the first foreign broker to get a seat on the Tokyo Stock Exchange.

The U.S. company's ¥125bn (\$5m) bid for the seat was rebuffed by Japanese broker Utsunomiya Securities, which had offered ¥1.64bn.

Nine companies bid for the exchange seat that became vacant as a result of the merger of one of Japan's second-tier brokers with Yamaichi Securities - one of the country's big four.

Commenting after the announcement on Tuesday of Utsunomiya's success, Mr Tetsundo Iwakuni, chairman of Merrill Lynch Japan, said: "We found in the course of the negotiations over this sale that the Japanese securities industry is very closed. I am afraid that this impression will now spread further."

As the nine bidders had sought to influence Yamaichi, in their favour over the last few months, many in the market appeared to think that the seat would inevitably go to Merrill Lynch. That would have been in line with the Japanese Government's policy of opening up the market and would have pleased Washington.

Japan and the U.S. have been engaged in high-level discussions on the yen-dollar exchange rate, financial and capital markets issues for more than a year.

In the end, however, group loyalties appear to have won over money and the cause of better international financial relations.

Utsunomiya is an associate of Yamaichi, which holds a 5.1 per cent stake in the smaller Hiroshima-based broker. Utsunomiya's bid failed to match the ¥1.7tn offered by Okatoku, which also expressed disappointment at the outcome.

There might be controversy over the Yamaichi decision the traditional inner-group financial system is used to help Utsunomiya play for its seat. The Hiroshima company only has capital of ¥325m, but it can expect to receive from Yamaichi up to a third of its bid price as it is a member of the same group. Additional funds are likely to be easy to raise as the seat will be seen as certain to lead to a sharp rise in earnings.

Merrill Lynch seems to be taking the decision over the seat stoically, although U.S. officials may not be as generous when they consider Yamaichi's application for a place on the New York Stock Exchange (at present it is the only one of the big four without a seat on Wall Street) in the new year. The U.S. broker is still supporting the Yamaichi application and remains hopeful of getting a seat in Tokyo in 1985.

Japan's Ministry of Finance, which strongly backed the open sale system used to sell this seat, is clearly a little embarrassed at the outcome.

Americans rush for London listing ahead of tougher rules

BY ALEXANDER NICOLL IN LONDON

CHRISTMAS ended early this year for the corporate finance department of City of London merchant banks and stockbrokers that are assisting a stampede by U.S. companies to obtain listings on the London Stock Exchange before the new year.

From January 1 the exchange's new Yellow Book comes into force, making its listing requirements conform with European Community directives and giving many of them the backing of law.

The City is still pondering the long-term implications of the new rules, which will make the procedure for issuing most types of securities - including those issued to finance takeovers - considerably more cumbersome.

The most immediate effect, however, has been to provoke a rush by U.S. companies to apply for listings because the new regulations make the process considerably more costly for them.

Until now London has accepted that companies listed on the New York and American stock ex-

changes have already submitted themselves to adequate scrutiny. To be quoted in London they simply had to arrange for the publication of their accounts on an Extel card, including financial records for five years, and publish a small newspaper advertisement.

Under the new rules U.S. companies will have to publish extensive details, including a full account of their history and activities, as would any other company applying for a London listing. Although all the information would already have been disclosed in New York its compilation into a formal document will involve bigger professional fees as well as other costs.

In December at least 20 U.S. companies will have secured London listings. So will have four British companies graduating from the unlisted securities market to a full listing, which would also be affected by the regulations.

The U.S. arrivals include Engelhard, the minerals and chemicals company, Escherich, the energy company, R. J. Reynolds Industries, the

tobacco and food group, Hospital Corporation of America and the Home Federal Savings and Loan Association.

The new Yellow Book not only makes listing requirements more specific, extensive and statutory, but includes new hureaucratic language. A prospectus will be known as "listing particulars" and a waiver of the rules a "derogation".

The City is uncertain what degree of flexibility the stock exchange's quotations department will see fit to apply. So far it has adopted a commonsense approach to granting waivers (derogations) of specific rules.

The department will certainly have more reading to do as it vets longer documents more formally. Merchant bankers and stockbrokers, after spending their days after Christmas helping to pre-empt the new rules, will work long hours in the new year as they prepare corporate clients - both British and U.S. - for shares quotes.

Bath and Portland accepts friendly £61m bid

By Martin Dickson in London

CONSOLIDATED Gold Fields, the UK-based international mining and industrial group, has unexpectedly stepped into the takeover battle for Bath and Portland Group, the quarrying and construction company, with a £61.5m (\$72.3m) agreed offer - some 20 per cent higher than the hostile bid launched last month by C. H. Beazer (Holdings), another UK group.

The Gold Fields deal was put together suddenly on Monday, Christmas Eve, after institutions holding 16 per cent of Bath and Portland's equity signalled that they were interested in selling.

"They canvassed the market and it became plain the company was going to someone," said Mr Humphrey Wood, chairman of Gold Fields ARC, the group's non-mining division. "If we were going to bid for Bath and Portland it was a question of move now or never."

Gold Fields already has a large and successful UK aggregates business, Amey Roadstone (ARC), which last year made the largest single contribution to the group's profits. Mr Wood said Bath and Portland would make "an excellent fit" with ARC, increasing its aggregates operations by 15 per cent, ready-mixed concrete by 17 per cent and coated stone by 4 per cent.

There was no immediate reaction to the offer from C. H. Beazer, an aggressively expanding housing and property group which has launched five takeover bids in the last year. Mr Brian Beazer, the chairman, said he had yet to see the terms of the Gold Fields bid and his board would "consider the matter most carefully". The company will meet its financial advisers, County Bank, today.

C. H. Beazer holds more than 22 per cent of Bath and Portland's equity - but that includes an 18 per cent stake acquired last October when it took over Bath-based property developer M. P. Kent.

Gold Fields said yesterday that under a special legal agreement Kent was obliged to follow the Bath and Portland board's recommendation of acceptance - unless it launched a higher offer itself.

Gold Fields, which has no stake of its own in Bath and Portland, also has irrevocable undertakings to accept its offer, if declared unconditional, from holders representing 16.18 per cent of the equity.

Nevertheless the Gold Fields deal still leaves open the possibility that Beazer, or another predator, might make an even higher bid attempt.

For every three ordinary 25p Bath and Portland shares, Gold Fields is offering one new ordinary Gold Fields 25p share, plus 420p in cash or a 5 per cent loan note. On the basis of Gold Fields' closing price on Monday of 485p, up 2p, each ordinary Bath and Portland share is worth 301.7p.

That compares with a Bath and Portland closing price on Monday of 281p, up 4p, and an equity and cash bid from Beazer worth 236.8p at Beazer's Monday close of 382p, unchanged on the day.

Gold Fields is offering holders of Bath and Portland's 5 per cent preference shares 100p in cash. If the offer becomes unconditional, Bath and Portland will declare a 3.5p dividend for ordinary shares, taking the total for the year to October 31 to 6.25p, against 6p in 1983.

Mr Iain Clarke, Bath and Portland's chief executive, said yesterday that Gold Fields had offered "a fair price" for the company. The two sides had already been discussing the possible sale of a Bath and Portland division, but Gold Fields had only made a full bid approach last weekend.

The size of the offer, relative to Beazer's, had made it very difficult for Bath and Portland to defend its position. "If we had to go anywhere, we were happy to go to ARC," he added.

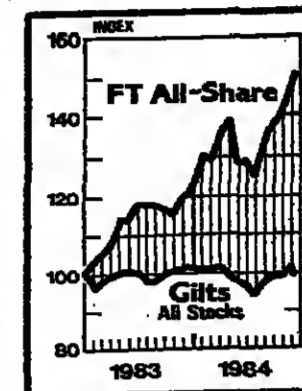
The bid is Gold Fields' largest single takeover deal for three years and accords with the group's strategic decision to concentrate on the mining and construction sectors it knows best, rather than diversifying into wider industry, where it had some bad burns in recent years.

Gold, particularly its South African interests, is still the group's largest single source of profits - 43 per cent last year, against 32 per cent for construction materials and 25 per cent for other mining and industrial activities.

However, construction materials account for some 33 per cent of sales, against 24 per cent for precious metals, and last year ARC showed record operating profits of £38.1m, compared with £35m in 1982-83.

THE LEX COLUMN Fair shares for all in 1984

A vintage year in London for equities, certainly, every bit as satisfying as the well remembered 1983. It has had the same rich bouquet of rising profits and dividends, and any reservations about the long-lasting depth of economic recovery underminded the 1984 market have been quelled by the specific gravity of capital gains - another 23 per cent, just a notch better than last year.



So almost everybody in the London equity market has good reason to feel quite a lot better off than two years ago. Just in terms of growth in the All Share, without any fancy fund-manager's footwork, the overall capital gain since the beginning of 1983 is a remarkably decent 52 per cent, and only negligible amounts of inflation are there to spoil the aftertaste. For the fortunate top layer of London stockholders, who have been able to withdraw their capital from the business of buying and selling equities, it has been a vintage that can never be equalled.

In naive domestic terms this is all a little surprising. This time last year many people thought that we had seen the best of the recovery in output and quite likely in UK industrial profits as well. In the same vein, not much comfort was expected from the interest rate environment - correctly enough, as it proved. Given this outlook, the narrow gap between share yields and the low-risk return on index-linked seemed to leave equities very little elbow-room.

It seems clear enough that the City of London has set whatever fears it has to one side, discounting a disastrous political outcome as totally improbable. Unless the strike ends in a shambles, its significance in the equity market will probably now be confined to a calculation of its favourable effects, such as output growth postponed into 1985 when it might otherwise have been relatively slack.

Likewise, the fear that the UK recovery might have run its course in 1983 was premature, to say the least. Output may not have gone ahead by a great deal in real terms - most estimates fall somewhere between 2 and 3 per cent - but profits clearly have. Even on a small rise in turnover, the UK economy still had the advantage of high operational gearing as it made use of spare capacity. Corporate earnings are estimated to have jumped by anything up to 35 per cent.

As far as simple arithmetic goes, the factor has done much to reconcile all these doubts with a 110 points rise in the All Share - to 579.90 - must be the rise in dividends. This has been strong enough to keep the market yield to almost exactly its level at the end of 1983, just a shade over 4.5 per cent. To achieve this has required a 15 per cent rate of dividend growth - which might stretch further by the time calendar-year companies have reported.

In real terms this is a clear 10 per cent improvement, the biggest post-inflation increase in distribution that the market has seen for a decade. Companies can well afford it; liquidity is still very strong and

with earnings cover of about 2 1/2 times on an historic cost basis, the dividend stream has perhaps gained a bit in overall quality. The old-style yield gap has thus widened a fraction; since conventional gilts have again failed to make progress during the year, falling yet again to pierce the 10 per cent yield barrier. Indeed, the resurgence of worries about the price of crude oil at the very end of the year stemmed a rather promising rally.

In a more indulgent currency climate, gilt-edged might have taken a firmer cue from Wall Street, where yields have been falling on and off for four or five months. Lately they have been doing so to the accompaniment of cuts in the Federal Reserve's discount rate, evidently signalling the Fed's wish to prevent the U.S. real economy from stalling.

Devaluation

In 1984, as for some time past, it is probably to the finances of the U.S. Government that one must look for the clue to what has happened elsewhere. It is, after all, the federal deficit which has pulled in such enormous surpluses on the U.S. capital account, enabling the dollar to rise still further against all currencies - and most new year predictions. It is exports from Europe and Japan which largely make up the offsetting current account deficit, and which have played a large part in improving the earnings experience of markets other than Wall Street.

Sterling's 29 per cent decline against the dollar has also brought spectacular translation gains into the accounts of British companies who were buying the American market when sterling was at its painful peak in 1980 and 1981.

Looked at through the other end of the telescope, that means London has not quite proved the strength, or body, that a dollar investor would wish to see. Wood Mackenzie estimates that the total return on the All Share was a mere 5.4 per cent to U.S. funds, compared with just over 6 per cent on a disappointing dull Wall Street.

Given pre-Christmas talk of \$30 oil, the short-term currency risk on sterling may be quite discouraging to U.S. investors. So it is just as well that UK funds seem to have taken the opposite view and piled into Telecom as if Wall Street had never been invented.

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World Weather

Forecast made by Pacific Telesis and follows the granting of a general waiver by Judge Harold Greene in Washington less than two weeks ago. Pacific Telesis, which was part of American Telephone & Telegraph until the break-up last January, had sales of \$5.75bn in the nine months to September 30.

Pacific Telesis operates the telephone system in California and Nevada and is keen to expand overseas in Europe and the Pacific basin. Earlier this year it tried to buy a stake in Mercury, the UK's privately owned telephone network competitor to British Telecom. Mercury is now a wholly owned subsidiary of Cable and Wireless.

Pacific Telesis is to buy Kensington Datacom, a small company set up earlier this year with the backing of a number of British institutions, including J. Henry Schroder Wangs, the Post Office Pension Fund and Barclays. Kensington Datacom runs an electronic mail service called One to One which ran into difficulties earlier this year because of problems with its computer. The deal is expected to be completed early next month. Pacific Telesis is thought to be paying about £1m (\$1.7m) for Kensington Datacom, which is the same as the original investment in the company. Pacific Telesis will inject fresh money into One to One in a bid to gain a significant share of the new but fast-growing market for electronic mail services in Britain.

At present the market is dominated by Telecom Gold, a joint venture between British Telecom and ITT Dialcom, which is a big electronic mail service in the U.S. The other main contender in Britain is Ezylink, a joint venture between Cable and Wireless and Western Union.

Pacific Telesis is looking at a number of other areas to expand in the UK. It is expected to concentrate on the emerging market for so-called value-added network services.

Britain				Europe				Africa				Asia				Australia			
Temp	Wind	Humid	Pres	Temp	Wind	Humid	Pres	Temp	Wind	Humid	Pres	Temp	Wind	Humid	Pres	Temp	Wind	Humid	Pres
London	12	12	1008	Berlin	10	10	1012	Nairobi	18	18	1015	Delhi	25	25	1015	Sydney	20	20	1015
Paris	11	11	1010	Rome	14	14	1012	Algiers	18	18	1015	Manila	28	28	1015	Perth	22	22	1015
Athens	16	16	1012	Madrid	13	13	1012	Cairo	22	22	1015	Bombay	28	28	1015	Brisbane	24	24	1015
Amman	15	15	1010	Lisbon	13	13	1012	Accra	24	24	1015	Colombo	28	28	1015	Adelaide	20	20	1015
Hanoi	20	20	1010	Oporto	13	13	1012	Johannesburg	20	20	1015	Calcutta	28	28	1015	Melbourne	18	18	1015
Singapore	28	28	1010	Brussels	10	10	1012	Durban	20	20	1015	Rangoon	28	28	1015	Hobart	18	18	1015
Bangkok	28	28	1010	Frankfurt	11	11	1012	Windhoek	18	18	1015	Yangon	28	28	1015	Darwin	28	28	1015
Manila	28	28	1010	Geneva	11	11	1012	Blantyre	18	18	1015	Nay Pyi Taw	28	28	1015	Townsville	28	28	1015
Singapore	28	28	1010	Zurich	11	11	1012	Maputo	18	18	1015	Manila	28	28	1015	Port Hedland	28	28	1015
Bangkok	28	28	1010	Basel	11	11	1012	Gaborone	18	18	1015	Delhi	28	28	1015	Broome	28	28	1015
Manila	28	28	1010	St Gallen	11	11	1012	Windhoek	18	18	1015	Calcutta	28	28	1015	Norfolk Island	28	28	1015
Singapore	28	28	1010	Lucerne	11	11	1012	Harare	18	18	1015	Rangoon	28	28	1015	Christmas Island	28	28	1015
Bangkok	28	28	1010	Bern	11	11	1012	Polokwane	18	18	1015	Yangon	28	28	1015	Phoenix	28	28	1015
Manila	28	28	1010	Yverdon	11	11	1012	Lusaka	18	18	1015	Nay Pyi Taw	28	28	1015	Darwin	28	28	1015
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Manila	28	28	1010	Nyon	11	11	1012	Polokwane	18	18	1015	Calcutta	28	28	1015	Norfolk Island	28	28	1015
Singapore	28	28	1010	Monthey	11	11	1012	Lusaka	18	18	1015	Rangoon	28	28	1015	Christmas Island	28	28	1015
Bangkok	28	28	1010	Esslingen	11	11	1012	Windhoek	18	18	1015	Yangon	28	28	1015	Phoenix	28	28	1015
Manila	28	28	1010	Wetzikon	11	11	1012	Harare	18	18	1015	Nay Pyi Taw	28	28	1015	Darwin	28	28	1015
Singapore	28	28	1010	Wädswil	11	11	1012	Lusaka	18	18	1015	Manila	28	28	1015	Port Hedland	28	28	1015
Bangkok	28	28	1010	Olten	11	11	1012	Windhoek	18	18	1015	Delhi	28	28	1015	Broome	28	28	1015
Manila	28	28	1010	Biel	11	11	1012	Harare	18	18	1015	Calcutta	28	28	1015	Norfolk Island	28	28	1015
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Singapore	28	28	1010	Wetzikon	11	11	1012	Lusaka	18	18	1015	Manila	28	28	1015	Port Hedland	28	28	1015
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Tenneco-Harvester deal faces Trade Commission probe

BY OUR FINANCIAL STAFF

THE U.S. Federal Trade Commission (FTC) has launched an anti-trust investigation into the proposal by Tenneco to acquire the farm machinery assets of International Harvester.

The move by the FTC came at the request of the U.S. Department of Justice, and officials said the investigation would most likely be completed by late January.

Tenneco has agreed to acquire Harvester's farm machinery assets for \$400m in cash and stock and to take over \$75m of Harvester's unfunded pension liabilities.

At the time of the announcement of the deal, Tenneco made it clear that the timing of the move had been partly dictated by possible anti-trust considerations. The FTC was seen as far more likely to allow the bid to go through under the failing companies laws, and it is not expected that the commission will now to block the deal.

The FTC now has the choice of either recommending approval of the deal to the merger screening committee, citing the failing company provision of the Clayton Act, or asking the Department of Justice to challenge it on anti-trust grounds.

FTC investigators are thought of

ready to have started soliciting data, comments and opinions from Harvester's chief farm industry competitors.

Officials said they did not believe any of Harvester's primary competitors would object to the deal because several were themselves engaged in similar negotiations.

One of these, Allis-Chalmers, is talking with Massey-Ferguson about jointly building and selling farm tractors and self-propelled combines in the U.S. and Canada. An agreement on such a joint venture could come in early 1985.

Deere managers said the company was closely watching the outcome of the FTC's investigation of the Tenneco-Harvester deal, noting that FTC approval might prompt Deere to take another look at the possibility of acquiring Sperry's New Holland unit.

In mid-1984, Deere's middle managers are believed to have submitted a plan to senior company management, recommending the acquisition of New Holland.

Senior Deere management rejected the proposal, however, citing expected adverse anti-trust reaction from the FTC and the Department of Justice as primary reasons

Paul Betts on why the oil derricks are going up around Paris

Total takes a gamble on home ground

COMPAGNIE Française des Pétroles, France's multinational oil group which trades under the Total name, has succumbed to the charms of the gentle rolling countryside of the Erié on the western flank of Paris.

Its interest in this region of cereals and sugar beet is not, however, purely aesthetic for, after Aquitaine in the south-west of the country, this area - only an hour away from Paris - has proved to be the most promising oil prospect in France.

Total is now the second largest oil producer after Esso, the French offshoot of the U.S. Exxon group, in the Paris basin - popularly known as "Dallas-en-Brie." Although the current operations in the basin are modest by international standards, Total, like Esso, is investing more and more in this local prospect.

The company plans to double its French exploration and production budget next year. "After spending about FF 200m (\$31m) in France this year, we plan to spend some FF 400m in 1985," says M Pierre Vailland, head of Total's worldwide exploration and production operations.

"The cost of drilling 40 to 50 wells in the Paris basin is the equivalent of drilling one deep offshore well in the Mediterranean. Quite frankly, I

prefer to drill 40 to 50 wells in the Paris basin," he says.

Total, with its partner, Triton, a French subsidiary of the UK-based Invest Energy company (itself a subsidiary of Triton Energy of Dallas), is currently producing about 2,500 barrels a day (b/d) of oil from its field at Villeperdue. M Vailland expects production to increase to a rate of between 8,000 and 8,500 b/d by the end of next year.

Total and Triton also have high hopes for a nearby field at Melun, which borders Esso's discovery at Chaunoy. Esso expects to produce 10,000 b/d at Chaunoy by next year.

Although this rate of production represents only a trickle within Total's worldwide oil output of around 800,000 b/d, it is, in the words of a company exploration official, "good money."

The Paris basin is the sort of prospect on which small and medium-sized independent oil companies thrive in the U.S. and at a time of general belt-tightening in the oil industry, the emphasis among the oil majors has shifted away from sheer volume.

Total is an exception. "What interests me is to see the FF 700m we have sunk into French exploration pay back as soon as possible," M Vailland says. He expects it will take three to four years for the Paris basin discoveries to pay back this amount.

Total's commitment to domestic activity also reflects the evolution in the group's approach to exploration and production, however. Unlike Elf Aquitaine, the other large French oil company which has grown rich on its huge gas reserves at Lacq in south-west France, or for that matter Esso, the largest crude oil producer in France, Total has only recently established its presence in the domestic exploration and production scene.

Traditionally, Total's main operations have been centred in the Middle East, Indonesia and the North Sea, but the French company has been seeking to restructure its international exploration and production operations through concentrating more on western OECD areas.

M Vailland says Total will be significantly increasing its exploration and production spending in the U.S. next year. "So far we have spent peanuts," he acknowledges.

Unlike Elf, whose U.S. strategy has been to concentrate on the new frontier regions of the U.S. outer continental shelf of California and Alaska, Total intends to adopt a much more cautious approach. It does not plan to go in initially for high-cost, high-risk U.S. oil prospects but stick to smaller onshore and offshore sites in Texas and Louisiana.

M Vailland also says there will be a significant increase in Total's exploration spending next year. Total this year devoted only FF 1.6bn to exploration, reflecting the squeeze following the heavy losses on its refining operations and the oil market slump. The company reported a loss of FF 1bn in 1982, the first in its history, but it has been recovering, reporting earnings of FF 420m in 1983 and of FF 1.2bn in the first half of this year.

Despite Total's efforts to redeploy some of its exploration operations away from traditional patches, the non-OECD countries will still account for more than half of the group's exploration and production budget next year, M Vailland would not disclose the size of next year's budget since it still had to be approved by the board and the group's recently appointed new chairman, M Francois-Xavier Ortoli, the former French EEC Commissioner and former Gaullist minister.

He says about 25 per cent of new exploration spending will involve the North Sea and about 30 per cent Africa. The Far East will probably account for less than 10 per cent of exploration investment. France about 10 per cent and the rest of the world 25 per cent.

Among the areas where Total has interests is Argentina, where promising offshore oil development prospects continue to be blocked by the Argentine debt crisis. In Sudan, Total is also holding on to extensive acreage but has no immediate exploration projects.

The geographic distribution of Total's exploration and production budget is still a far cry from those of other large oil companies. "Between 70 and 90 per cent of their budgets are concentrated these days in the North Sea and in North America," M Vailland says.

M Vailland and other senior Total executives appear encouraged by the results so far of their recent foray into oil exploration in France, modest as they may be on an international scale. Production costs are low in the Paris basin, averaging between \$8 and \$8 a barrel. The crude is of good quality with an API gravity of 34 degrees at Villeperdue and around 37 degrees at Esso's Chaunoy field.

Moreover, the large Elf refinery of Nargis is conveniently close to the Paris basin oil fields. The two French oil companies, Total and Elf, are now so enthusiastic about the area that they have applied for permits to conduct seismic studies in the city of Paris itself.

"After all, there may well be oil under the city and the Eiffel Tower would make a perfect oil derrick," said a Paris-basin oil man.

Winding up order for Deak Perera

By David Dodwell in Hong Kong

THE HONG KONG Government will today petition for a winding-up order on Deak Perera (Far East), the Hong Kong-based foreign exchange and gold dealer that ceased operations two weeks ago when its U.S.-based parent filed for protection from creditors under U.S. bankruptcy laws.

The move follows the appointment earlier this week of an inspector to investigate the affairs of the company and the granting of a High Court injunction freezing the company's assets in Hong Kong. The collapse of Deak Perera, a group which spans financial services as well as gold and foreign exchange dealing, has raised embarrassing questions in both Hong Kong and the neighbouring Portuguese-administered territory of Macao about the regulation of companies not entitled to operate as deposit-taking companies.

Local depositors who are owed more than \$30m have over the past week put increasing pressure on the Government to liquidate the company. There is concern that delay may have allowed the group to transfer deposits outside the territory's legal jurisdiction. Deak Perera had a subsidiary - Deak Perera Finance - which was registered in Hong Kong as a deposit-taking company. It has become clear since the collapse, however, that many deposits placed with the company were channelled through the gold and foreign exchange dealing subsidiary to Deak and Co (Macao).

The licence of Deak Perera Finance has been suspended on the grounds that it was being managed "in a manner detrimental to depositors."

Swissair expects higher profits

BY JOHN WICKS IN ZURICH

SWISSAIR, Switzerland's national airline, now expects to show a higher net profit for 1984 than the record SwFr 59.3m (\$22m) booked for the previous year. In November, the company had said it awaited earnings at about the same level as for 1983.

According to Mr Robert Staubli, management chairman, the improvement has been possible despite the negative effect of exchange-rate developments. For the first time since 1979, he said, actual flight operations had just been in profit.

However, Mr Staubli pointed to a number of "unwelcome aspects" in 1984 business. Those included the drop in passenger volume at a time

of worldwide sales growth, difficult landing-rights negotiations and increased costs in a number of sectors.

He said the airline had taken steps to counteract such negative factors wherever possible and necessary. The inclusion of such measures in the 1985 budget meant that Swissair again reckoned on "positive earnings prospects" next year. The budgeted net profit for 1985 is put in the same bracket as that for this year and 1983, he added.

Hilti, the Liechtenstein-based industrial concern, will book record earnings for 1984, according to Professor Martin Hilti, the company chief.

With consolidated group turnover

up 18 per cent to some SwFr 1.45bn (\$564m) profits and cash flow are expected to grow by more than 30 per cent for the year. That means net earnings will be well over SwFr 30m against the 1981 record profit of SwFr 27.6m.

Hilti, which specialises in making fastening systems and power tools, benefited this year particularly from increased marketing efforts and cost-control programmes, according to Professor Hilti. The company had also profited from better economic conditions in principal markets and a favourable exchange rate.

He added that Hilti expected "further favourable development" in the coming year.

Borregaard lifts stake in Nora

By Fay Gjester in Oslo

NORSK HYDRO and Borregaard, two of Norway's leading industrial swap worth about Nkr 200m (\$22m), which substantially increases Borregaard's stake in Nora, a profitable foods and beverage group, while making Hydro the 100 per cent owner of the chlorine plant at Norway's Rafnes petrochemicals complex.

Since the Rafnes complex was completed in 1977, the chlorine plant has been jointly owned by Hydro and Borregaard. In exchange for Borregaard's half-share in the facility, Hydro has sold its 22 per cent shareholding in Nora.

Bond buys Brisbane TV station

BY OUR FINANCIAL STAFF

BOND Corporation, master company of Mr Alan Bond's Perth-based beer, property and investment group, has agreed with Amalgamated Wireless Australia (AWA) to acquire the QTQ 9 television channel in Brisbane, Queensland, for A\$85m (U.S.\$34.2m).

Bond Corp has also agreed to sell its Perth radio station 6KY to AWA for A\$7.5m. The radio station was part of the Swan Television and Wireless company bought a year ago by Bond Corp.

Bond Corp said the acquisition of the Brisbane station demonstrated its commitment to the television industry. It currently operates the Perth television station STW 9 through Swan.

Both QTQ 9 and STW 9 are now closely associated through their involvement with the Channel 9 network of television operators, and the management and operations of QTQ 9 are well known to STW 9.

The acquisition price for QTQ 9 would be made in cash from Bond's existing lines of credit, the company said.

largely from high palm oil prices, together with higher production of oil palm and increased income from associated companies.

Consolidated attributable profit was only 30 per cent higher at 60m ringgit because of the non-recurring sale of investments in the previous financial year.

The final dividend is 10 cents, making an unchanged 15 cents for the year. The group expects profits for 1985 to be as good as the results just achieved, barring a sharp decline in palm oil prices.

Kuala Lumpur Kepong doubles profit

BY WONG SULONG IN KUALA LUMPUR

KUALA Lumpur Kepong, Malaysia's fourth largest and rapidly-expanding plantation group, has doubled its pre-tax profits to 102m ringgit (\$42.5m) for the year ended September, on turnover which rose 72 per cent to 249m ringgit.

The improvement stemmed

NZ licence for Seagram

SEAGRAM, the international distilling group, has received a licence to produce gin and vodka in New Zealand. It will expand and re-equip its NZ subsidiary, Wilson Distillers, which already makes whiskey, to produce gin and vodka.

It will use New Zealand as a base for exports to Australia and the South Pacific.

How to identify counterfeit securities

BY MAGGIE URRY IN LONDON

SCROOGE used to spend Christmas counting his money. Years of gloating over his gold meant that he could spot a fake sovereign from more than an arm's length away. Life is harder for a Eurobond investor looking through his portfolio. Counterfeit bonds can look very like the real thing.

The anonymity value of bearer bonds is well known, but since the actual bonds are the only evidence of ownership, they also lay the buyer open to counterfeiters. The case of the fake J. C. Penney zero-coupon bonds is still fresh in investors' minds.

Those bonds were picked up by an eagle-eyed banker when they were delivered to Morgan Guaranty in December 1982.

Had they not been noticed, they could have passed around the system for years and been found only at redemption. Perhaps there are other dud bonds out there now.

So how can an investor tell if

what he has is the genuine article? The bonds have a number of safeguards incorporated by the printers. If these safeguards are missing or do not look and feel right, a bondholder should question whether there is something wrong with his paper.

Unfortunately, these features are not universal among Eurobonds. The British Bankers' Association has recently laid down minimum requirements for printing Certificates of Deposit if they are to be good for London delivery. They cover four standards for the paper and 13 printing techniques - most of which would fumigate a counterfeit or forger on their own, and when combined form a formidable line of defence.

Most bonds will have an intaglio border. Intaglio (the "g" is pronounced) printing, by using steel engraved plates, gives that slight raised effect to the ink, which feels rough when a finger is rubbed over

it. A litho-printed copy would just have a flat layer of ink on the paper.

The intaglio process, which is recommended by Interpol as providing the maximum guarantee against counterfeiting, also gives very clear detail to the complex pattern which a photocopy or other printing process cannot reproduce. So if the border on the bond looks blurred, get suspicious.

Photocopiers can also be defeated by the "void concept" now compulsory for CDs. A word, such as "void," can be hidden in the final detail of printing, which shows up the certificate in colour photocopied.

Intaglio printing can also conceal a "latent image," a feature developed by Bradbury Wilkinson, the security printers. From above the printing looks just like the usual pattern, but if the document is tilted and read from the edge of the paper, a message appears which has been hidden in the depth of the

raised ink. The latent image can be produced only by intaglio printing.

Printers can use special inks which will produce a nasty mark if a forger tries to alter or erase them - for instance when trying to change the amount from \$5,000 to \$10,000. Fluorescent ink can be used, which will glow green under ultra-violet light but looks black or is invisible under ordinary light.

A fake is easiest to detect when it is compared directly with a genuine bond. Euro-clear and Cedel, as well as the issuer of a bond, keep specimen copies. They can check that the security features of the serial numbers match up, and that the serial numbers are correct.

Many bonds, especially older ones, do not include some of these, and other security features which printers can incorporate. Stock exchanges now require some of these features to be included in bonds which they list. In the end, however, it is up to issuers to decide

IRELAND FINDS A NEW WAY TO TRIM BORROWING COSTS

Dublin cashes in on easier terms

BY MARGARET HUGHES, RECENTLY IN DUBLIN

IN APRIL the Irish Republic became one of the first of the current spate of sovereign borrowers to negotiate easier terms on an existing syndicated loan, taking advantage of better market conditions.

Now, however, it is adopting a different approach to reduce the cost of its foreign borrowing. Instead of renegotiating existing loans, Ireland aims to prepay as much as possible of its credits using funds raised on easier terms either through floating-rate notes (FRN) issues with longer maturities or in the fixed-rate bond market.

Its priorities are to prepay short-term maturities such as the multi-currency two-year credits arranged privately through Japanese banks and syndicated credits with higher margins, particularly those maturing in the late 1980s when the Republic faces a repayment bump. In both 1988 and 1989, repayments of existing debt are scheduled to top the £500m (\$891m) mark, which the Finance Ministry would like to reduce to about £200m. With only some £100m of existing debt to be rolled over next year, there should be scope for doing so. Assuming

Ireland's debt repayment schedule	
	(€m)
1987	650
1988	885
1989	926
1990	880

That compares with a reduction of 4 point achieved during the somewhat acrimonious renegotiation this year on the Labor tranche of the \$550m syndicated loan first arranged in June 1983 by Citicorp.

This year, the Republic will have prepaid loans totalling between \$400m and \$500m. Next year it hopes to prepay some \$800m.

The total covers \$500m of syndicated loans originally raised at 4/2 point over Libor and some \$100m of short-term multi-currency credits raised through Japanese banks. The rest are note-purchase facilities maturing in 1988 and 1989 where it wants to extend the maturities. The Department of Finance intends to raise the funds through a combination of FRN issues and fixed-rate bonds with the aim of maintaining a ratio of 3 to 2 between the two.

Part of the proceeds from the DM 200m 10-year bond which is to be issued in January will be used to prepay debt while the Ecu 100m raised on the fixed bond market this month will go towards next year's new money.

Ireland's total outstanding foreign debt currently stands at around \$8bn. Its debt service ratio is around 18 per cent this year but should drop to 10 per cent in 1985.

Since 1981, when it raised £1.2bn, Ireland has been reducing the level of its new foreign borrowing. This year the target for new money was £640m. Under the economic plan announced in the autumn, the aim is to "control" the amount raised abroad. The Department of Finance has already arranged foreign borrowings totalling £200m towards next year's gross foreign borrowing requirement.

In recent years Dublin has been able to raise increasing amounts domestically as liquidity has grown with the reduction in the balance of payments deficit. That has been reduced from 15 per cent of gross national product in 1981 to 5 per cent this year and the target is to bring it down to 3 per cent by 1987.

Company Notices

The Kingdom of Thailand
U.S.\$85,000,000
Floating Rate Capital Notes due 2000

In accordance with the provision of the Notes, notice is hereby given that the Rate of Interest for the last three months of the Interest Period ending on 28th March, 1985 has been fixed at 9 1/4 per annum. The interest accruing for such a three-month period will be U.S.\$117.19 in respect of the U.S.\$5,000,000 denomination and U.S.\$5,859.38 in respect of the U.S.\$25,000 denomination and will be payable, together with the interest for the first three months of the said Interest Period on 28th March, 1985, against surrender of Coupon No. 2.

27th December, 1984
Manufacturers Hanover Limited
Reference Agent

Banco Nacional do Desenvolvimento Economico
U.S. \$50,000,000
Floating Rate Notes 1989

Notice is hereby given pursuant to the Terms and Conditions of the Notes that for the three months from 27th December, 1984 to 27th March, 1985 the Notes will carry an interest rate of 9% per annum. On 27th March, 1985 interest of U.S.\$22.50 will be due per U.S.\$1,000 Note and U.S.\$225.00 due per U.S.\$10,000 Note for Coupon No. 23.

European Banking Company Limited
(Agent Bank)
27th December, 1984

Weekly net asset value

Tokyo Pacific Holdings (Seaboard) N.V.
on 21st December 1984, U.S. \$97.80

Listed on the Amsterdam Stock Exchange

Information: Pierson, Holding & Pierson N.V., Herengracht 214, 1016 BS Amsterdam.

U.S. \$50,000,000
Hapoalim International N.V.
Guaranteed Floating Rate Notes 1988

For the six months 28 December 1984 to 28 June 1985 the Notes will carry an interest rate of 9 1/4 per annum. Coupon Value U.S.\$480.28. Listed on The Stock Exchange, London

BUILDING SOCIETIES SURVEY

It is proposed to publish a survey on the above subject on Saturday 16th February 1985.

For further details and advertising rates please contact
JEREMY DEEDS
Financial Times, Bracken House
10 Cannon Street, London EC4P 4BY
Telephone 01-248 8000 ext. 4008

Relocation manoeuvre by Good Relations

By Ray Maughan
Good Relations, the first public relations company to be quoted on the London stock market, is pulling its corporate affairs and city communications divisions out of the Square Mile...

Amalgamated Estates £3m bid for L & M Securities

BY MARTIN DICKSON

Amalgamated Estates, the property investment company, is making a £3m all-paper bid for London and Manchester Securities, a property development company quoted on the Unlisted Securities Market...

Rotaprint warns on full year outcome as losses deepen

THERE HAS been a setback at Rotaprint, maker of offset lithographic printing machines. The loss for the first half has shot up from £18,000 to £43,000...

UK ECONOMIC INDICATORS

Table with columns: ECONOMIC ACTIVITY—Indices of industrial production, manufacturing output (1980=100), engineering orders (1980=100), retail sales volume (1973=100), registered unemployment (excluding school leavers) and unfilled vacancies (000s). All seasonally adjusted.

OUTPUT—By market sector; consumer goods, investment goods, intermediate goods (materials and fuels); engineering output, metal manufacture, textiles, leather and clothing (1980=100); metal machine tools (000s, monthly average).

EXTERNAL TRADE—Indices of export and import volume (1980=100); visible balance; current balance (Em); all balance (Em); terms of trade (1980=100); exchange reserves.

FINANCIAL—Money supply M0, M1 and sterling M3, bank advances in sterling to the private sector (three months' growth at annual rate); building societies' net inflow; HP, net credit; all seasonally adjusted.

INFLATION—Indices of earnings (Jan 1980=100); basic materials and fuels, wholesale prices of manufactured products (1980=100); retail prices and food prices (1974=100); FT commodity index (July 1952=100); trade weighted value of sterling (1975=100).

BOARD MEETINGS

Table listing board meetings for companies like Alack (Paris), Haynes Publishing, Jones Street, New Court Natural Resources, Newmark (London), Smiths, Bookham Engineers, Hons (Robert), Mar 26, M & G Oil Trust, Jan 9, Oakwood, and Virgin Patten International, Jan 10.

ICC Oil profits rise

Higher taxable profits of £416,000, against a restated £369,000, were attained by ICC Oil Services, a USM stock engaged in corrosion control/specialist coatings, industrial services, building cleaners, restoration and preservation.

A slightly lower pre-tax loss of £74,000 compared with £77,000 was incurred by Russell Brothers (Federation) specialist joinery and exhibition contractor, for the half year to August 31 1984.

COMPANY NEWS IN BRIEF

Amalgamated, which lost £1.5m in the year to last March, has been under the chairmanship of Mr David Pearl since the spring. It raised some £1m last month through a rights issue. London and Manchester, which reversed into Carlton Real Estates last January, achieved pre-tax profits of £376,000 in 1983.

BIDS AND DEALS IN BRIEF

BAT Industries has announced details of the unsecured loan of £1m to be repaid by 30 September 20 1984. The alternatives are for each Hambro share either 12 1/2 per cent unsecured loan for £100 of a value of 55p (subject to an overall limit of £100m nominal); or for each Hambro share, loan notes in the principal amount of 55p.

LADBROKE INDEX

Based on FT Index 925-929 (+4) Tel: 01-427 4411

BANCO ESPRITO SANTO E COMERCIAL DE LDBRCA. Floating Rate Notes due 1990 in accordance with the provisions of the Notes which are hereby given that the rate of interest for the period 21st December 1984 to 21st June 1985 has been fixed at 9 1/4% per annum.

Net revenue of the Brunner Investment Trust improved from £1.15m to £1.28m in the year ended November 30 1984 and the dividend is lifted from the equivalent of 1.825p to 2p net with a final of 1.1p. Year-end net asset value came out at 86.3p, compared with 78.4p the year before.

Net asset value per 25p share of the Bankers' Investment Trust has risen by 16p per cent over the past five years. At the end of the 12 months to October 31 1984 the value was 106.1p compared with 84.8p a year previous.

Two directors of Health Care Services, Mr Graham Hart and Mr Peter Dewe Matthews, have purchased between 10,000 and 50,000 ordinary shares respectively at 23p each.

N.V. BENEVENT

On the 20th December 1984, on the initiative of Investco NV, in cooperation with venture founders (Walham, Massachusetts, USA), has been incorporated the Belgian limited company 'Beneventure Founders Venture Capital Fund NV' or 'Benevent' for short.

Granville & Co. Limited

Over-the-Counter Market table listing various stocks and their prices, including High Low, Company, Price, Change, Gross Yield, P/E, and Fully Paid.

NOTICE CANON INC.

Re: 6 1/2% U.S. Dollar Convertible Debentures due December 31, 1994 and adjustment of conversion price to be made as a result of the authorization of free share distribution.

GROVEBELL GROUP PLC

1,884,541 7.5% convertible redeemable cumulative preference shares of £1 each fully paid ("new 7.5% preference shares")

FPL GROUP. FPL Group, Inc. (Incorporated with limited liability under the laws of the State of Florida, United States of America) Issued and reserved for issue on 31st December, 1984*

National Westminster Bank PLC. U.S. \$150,000,000 Floating Rate Capital Notes 1990. In accordance with the provisions of the Notes notice is hereby given that for the six months interest period from 27th December, 1984 to 27th June, 1985 the Notes will carry an Interest Rate of 9 1/4% per annum.

TELEPHONE 01-246 8086 for the FT INTERNATIONAL MARKET REPORTS. Including Wall St, Tokyo, Sydney and Hong Kong. Updated twice daily to include opening Wall St advice.

WORLD STOCK MARKETS

WALL STREET

Response to rate cut dwindles

LITTLE further response emerged on Wall Street yesterday to the half-point cut in the federal discount rate...

Trading was light, with turnover down to about half of Monday's level and prices trading water around Monday's closing values.

At the close the Dow Jones industrial average was down 1.22 to 1,208.92. There was some disappointment at the sluggish response on Monday from the bond market to the cut in discount rate...

The Federal Reserve was accommodative towards pressures of the holiday period, announcing \$2bn in customer repurchases when federal funds edged up

Stock markets in London and most other European centres remained closed yesterday, as did those in Hong Kong, Australia, South Africa and Canada.

to 8 per cent and by buying bills after the Treasury sale of \$6.2bn of four-year notes. A further \$2.4bn in Treasury securities are up for auction over the coming week.

The stock market opened with a fall of 2.65 points on the Dow average, which had climbed by 11.18 on Monday, in its first response to the Fed's cut in the discount rate.

IBM at \$123 1/4 shed an early 3/4. General Motors traded unchanged at \$78 and Ford held at \$45 1/4. Chrysler, which is adding production capacity, gained 3/4 to \$31 1/4.

Phillips Petroleum was again to the fore on the active stocks list, rallying 5/4 to \$45 1/4 after falling by nearly \$10 on Monday on news of the plan to restructure the company in order to ward off the bid from the Boone Pickens partnership.

Mesa Petroleum, the Pickens group, added \$ 1/4 to \$28 1/4 in subdued trading. Mr Pickens and his partners are guaranteed a profit of \$89m from the Phillips plan.

The hope of replacing Phillips in Mr Pickens's affection pushed several speculative oil stocks ahead. Unocal added \$ 1/4 to \$38 1/4 and Sun Oil added a similar amount to \$47 1/4.

Home computer issues steadied, with Commodore International recovering by \$ 1/4 to \$17 after last week's disappointing sales forecast. Retail issues were sluggish, while awaiting details of Christmas trading.

In the credit markets, Treasury bill and money-market rates were narrowly mixed in quiet trading. With most institutions now out of the market until the year-end, bonds lacked support. The key 1 1/2 per cent bond of 2014 fell 1/2 to 102 1/4.

TOKYO

Early gains swiftly give way

LATE profit-taking pressure eroded early gains to leave share prices slightly higher in Tokyo yesterday, writes Shigeo Nishiwaki of Jiji Press.

The Nikkei-Dow market average of 225 select issues stood more than 47 points above the previous day's close at one point but finished at 11,494.59, up 2.30. The Tokyo Stock Exchange index of all stocks listed on the first section rose 6.00 to 904.99, topping 900 for the first time. Volume swelled to 759.65m shares, from Tuesday's 462.48m.

The rises in the indices reflected the strong performance of financial and large-capital stocks. Declines, however, outnumbered advances by 405 to 339, with 128 issues unchanged.

The market got off to a fast start as investors bought lagging large-capital stocks and financial and incentive-backed issues, hoping for further price gains in the new year. Incentive-backed issues, however, later came under heavy selling pressure, while blue chips were bearish throughout the day.

Kansai Electric Power jumped Y40 to Y1,580, buoyed by a decreasing interest burden because of the fall in interest rates and the expected deregulation of Japan's electric power industry.

Some large-capital chemicals and property issues were traded briskly. Mitsubishi Estate gained Y27 to Y597 and Nippon Yusen Y5 to Y260. Toyo Soda advanced an initial Y13 but closed Y1 lower at Y370.

Financial issues were in the spotlight. Sumitomo Bank added Y100 to a record Y1,840, eclipsing the previous high of Y1,760 set on December 7. Tokio Marine

and Fire rose Y28 to Y735. Nomura Securities Y44 to Y899 and Sumitomo Trust and Banking Y80 to Y700.

Some pharmaceuticals moved well. Supported by continued investor interest in biotechnology, Asahi Chemical topped the actives list with 83.6m shares changing hands, rising Y14 to Y714. Yamouchi and Fujisawa advanced Y140 and Y110 to Y2,480 and Y1,190 respectively.

Small-lot selling sent blue chips lower on a broad front. Matsushita Electric Industrial lost Y10 to Y1,550. Sony Y40 to Y3,350 and Kyocera Y150 to Y8,920.

Bond prices firmed slightly, reflecting active buying by securities companies. The yield on the benchmark 7.3 per cent government bond, maturing in December 1993, dropped to 6.90 per cent, from Tuesday's 6.55.

EUROPE

THE DOMINANT feature of a firm Paris session yesterday was a resumption of dealings in Creusot-Loire as well as in Schneider, which has been the effective parent of the now-liquidated engineering group.

Their return after an absence of nearly 8 1/2 months was short-lived, though - both were again suspended amid a hefty imbalance of orders. A writer of sell orders hit Creusot-Loire, due to be traded on the forward market until January 24 to allow accounts to be settled. Against a last quotation of Ffr 25.50 on June 13, it was indicated at Ffr 12.

Schneider, halted the same day at Ffr 88.50, drew vigorous buying demand and an indicative quotation of Ffr 107.

Overall, an active start died away well before the finish. Good gains remained for issues such as Michelin, Ffr 25 ahead at Ffr 750, and Radiotechnique, up Ffr 9 to Ffr 213. Construction stocks were poor, however - SGE-SE fell Ffr 5.70 to Ffr 42.50 and Bouygues Ffr 10 to Ffr 880.

Electrical utilities led a cautious Madrid rally. Hidrola and Iberdrua added 1.2 and 1.3 points respectively to 78.7 per cent and 83 per cent of nominal value. Banks weakened.

SINGAPORE

MALAYSIAN issues were the prime focus of selective Singapore buying, attributed in part to a reported easing of tensions within the ruling Kuala Lumpur coalition.

By contrast, the dent in the Singapore Government's parliamentary hold made in the weekend elections there had little impact, and quiet trading overall took the Straits Times industrial index 8.66 higher to 816.38.

Malaysian-incorporated issues drew the biggest activity: volume leader Textile Corp jumped 25 cents to S\$1.81 and Malaysian United Industries 32 cents to S\$3.24.

Indices

NEW YORK-DOW JONES

Table with columns for Dec 28, Dec 27, Dec 26, Dec 25, Dec 24, Dec 23, Dec 22, Dec 21, Dec 20, Dec 19, Dec 18, Dec 17, Dec 16, Dec 15, Dec 14, Dec 13, Dec 12, Dec 11, Dec 10, Dec 9, Dec 8, Dec 7, Dec 6, Dec 5, Dec 4, Dec 3, Dec 2, Dec 1, 1984, and Since Completion.

STANDARD AND POORS

Table with columns for Dec 28, Dec 27, Dec 26, Dec 25, Dec 24, Dec 23, Dec 22, Dec 21, Dec 20, Dec 19, Dec 18, Dec 17, Dec 16, Dec 15, Dec 14, Dec 13, Dec 12, Dec 11, Dec 10, Dec 9, Dec 8, Dec 7, Dec 6, Dec 5, Dec 4, Dec 3, Dec 2, Dec 1, 1984, and Since Completion.

N.Y.S.E. ALL COMMON

Table with columns for Dec 28, Dec 27, Dec 26, Dec 25, Dec 24, Dec 23, Dec 22, Dec 21, Dec 20, Dec 19, Dec 18, Dec 17, Dec 16, Dec 15, Dec 14, Dec 13, Dec 12, Dec 11, Dec 10, Dec 9, Dec 8, Dec 7, Dec 6, Dec 5, Dec 4, Dec 3, Dec 2, Dec 1, 1984, and Since Completion.

TORONTO

Table with columns for Dec 28, Dec 27, Dec 26, Dec 25, Dec 24, Dec 23, Dec 22, Dec 21, Dec 20, Dec 19, Dec 18, Dec 17, Dec 16, Dec 15, Dec 14, Dec 13, Dec 12, Dec 11, Dec 10, Dec 9, Dec 8, Dec 7, Dec 6, Dec 5, Dec 4, Dec 3, Dec 2, Dec 1, 1984, and Since Completion.

MONTECARLO

Table with columns for Dec 28, Dec 27, Dec 26, Dec 25, Dec 24, Dec 23, Dec 22, Dec 21, Dec 20, Dec 19, Dec 18, Dec 17, Dec 16, Dec 15, Dec 14, Dec 13, Dec 12, Dec 11, Dec 10, Dec 9, Dec 8, Dec 7, Dec 6, Dec 5, Dec 4, Dec 3, Dec 2, Dec 1, 1984, and Since Completion.

NEW YORK ACTIVE STOCKS

Table with columns for Friday, Change, Closing on day, and Change.

Table of international stock indices including Australia, Austria, Belgium, Denmark, France, Germany, Hong Kong, Italy, Japan, Netherlands, Norway, Singapore, South Africa, Spain, Sweden, Switzerland, and World.

*Sunday December 22: Japan Nikkei-Dow 11,462.01, TSE 894.32. **Base values of all indices are 100 except Australia All Ordinaries and Metals-500, NYSE All Common-50, Standard and Poors-10, and Toronto Composite and Metals-1,000. Toronto indices based 1975 and Montreal Portfolio 4/1/75. †Including bonds, ‡40 Industrials, §40 Industrials plus 40 Utilities, ¶20 Financials and 20 Transportations, c Closed, (u) Unavailable.

NOTICE OF REDEMPTION

To Holders of 3 1/2% Sinking Fund Bonds Due 1986 Direct and Unconditional General Obligation of the Republic of Italy

NOTICE IS HEREBY GIVEN that pursuant to Sections 4 and 6 of the Fiscal Agency Agreement and Sections 5 and 6 of Exhibit A dated January 15, 1971 between Azienda Autonoma Delle Ferrovie Dello Stato, "Issuer" with the intervention of the Minister of the Treasury of the Republic of Italy and Chemical Bank, "Fiscal Agent," the bonds bearing the following serial numbers have been drawn for redemption on February 1, 1985 by operation of the Sinking Fund at the Redemption Price of 100% of the principal amount thereof, together with accrued interest to the date thereof, and that from and after such date fixed for redemption interest thereon will cease to accrue.

SERIAL NUMBER

Large table listing serial numbers for bonds to be redeemed, including columns for serial number and corresponding bond details.

OVER-THE-COUNTER

Nasdaq national market, 2.30pm prices

Table of over-the-counter stock prices with columns for Stock, Sales, High, Low, Last, Day, and Change.

LONDON

Monday's chief price changes

RISES

Table of rising stock prices in London, including British Petroleum, Shell, and others.

FALLS

Table of falling stock prices in London, including British Petroleum, Shell, and others.

Good Relations

Table of stock prices in London, including Good Relations.

Continued on Page 16

The above numbered bonds will be redeemed at the principal offices of the Fiscal Agent, Chemical Bank in New York City or at the main offices of Chemical Bank and S. G. Warburg & Co., Limited in London, the main offices of Banca Nazionale del Lavoro in Milan and Rome, the main office of Banque Lambert S.C.S. in Brussels, the main office of Banque Lambert-Luxembourg S.A. in Luxembourg, the main offices of First National City Bank in Amsterdam, Frankfurt am Main and Paris and the main office of Labor Bank A. G. in Zurich, upon surrender of such bonds for payment and cancellation.

Dated: December 27, 1984 CHEMICAL BANK, Fiscal Agent

Handwritten text at the top of the page, possibly a signature or date.

AMERICAN STOCK EXCHANGE COMPOSITE CLOSING PRICES

Main table of American stock exchange closing prices, organized into columns by stock category (e.g., A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z).

Continued on Page 16

NEW YORK STOCK EXCHANGE COMPOSITE CLOSING PRICES

Main table of New York stock exchange closing prices, organized into columns by stock category (e.g., A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z).

Notes and disclaimers regarding the data, including information about sales figures, annual high and low prices, and dividend information.

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WORLD STOCK MARKETS

Table of world stock markets including Germany, Austria, Norway, Australia, Japan, and Over-the-Counter. It lists various stock indices and individual stock prices with their respective changes.

AMERICAN STOCK EXCHANGE CLOSING PRICES

Table of American stock exchange closing prices, including a sub-section for 'Continued from Page 15' listing various stocks and their prices.

Advertisement for 'Get your News early in Hamburg' featuring a picture of a church and text about receiving the Financial Times.

Advertisement for 'HAND - DELIVERY IN PARIS' with contact information for Benjamin M. HUGHES and the Financial Times (Europe) Ltd.

MARKET REPORT

RECENT ISSUES

Markets begin extended trading Account in confident mood

Account Dealing Dates

Table showing account dealing dates for Dec 24 to Feb 4.

The shortened pre-Christmas session, the first of a three-week trading account on the London Stock Exchange, was well-attended on Monday. Trade was relatively active from the opening with investors showing a renewed enthusiasm for leading equities and for the advance guard of New Year Press ups.

Sentiment in the latter area was given a much-needed prop by the weekend news of a cut to 5 per cent in the key Federal Reserve Discount rate. The move was not entirely unexpected but it still generated a better feeling about interest rates both here and in America. Selected longer-dated gilts moved up 3 and the short-managed gains extending to 1/4, but index-linked issues were overlooked.

Leading industrial shares achieved improvements of only a penny or two but, after the previous two-day setback brought the FT Ordinary share index back over 15 points from its all-time high of 942.6, the tone remained buoyant. The index closed 1.7 up at 926.0 from a session closing at 924.5. Shares recommended in the weekend Press columns often made larger gains along with some situation stocks.

The major clearing banks edged higher under the lead of NatWest, 8 up at 588p. Lloyds improved 4 to 522p and Barclays hardened 3 to 577p. Royal Bank of Scotland attracted fresh support on suggestions that Lloyds Bank may be prepared to sell its 21.34 per cent stake and the close was 6 up at 256p.

Among recently-issued equities, Candover Investments moved up 8 to 188p. B&K-quoted Craton Lodge formed 6 to 183p. Seasonal cheer among Breweries proved to be of a selective nature. The leaders traded quietly and showed little alteration with the noteworthy exception of Arthur Guinness which started 1 1/4 to a 1984 peak of 213p following the £11.9m acquisition of Neighbourhood Stores.

Building issues attracted occasional buying interest. RBS Industries, 20 up at 262p, and Redland, 29p, both improved a couple of pence. Housebuilders William Leece added 2 1/2 to 127p, while timber concern John Carr hardened 2 to 65p.

ICI settled a couple of pence at 740p, but other Chemicals continued to improve. Coasite attracted fresh support and

hardened 2 to 238p, while Coates Brothers A put on 8 to 148p. Ellis and Everard formed 4 to 218p and the internationalist rose 6 to a 1984 peak of 455p in restricted markets.

Secondary Stores attracted occasional support. Dixons responded with a rise of 5 to 864p, while Mail-order, high-lighted Empire, 8 dearer at 98p. Multiple shoe retailers J. W. Wasson met fresh demand and formed 5 more to 63p.

Engineering firms strayed from their previous closing levels, although Delta encountered further sporadic demand and put on 5 at 108p. United Spring were noteworthy among smaller priced issues with a rise of 1 1/2 to 184p.

Thorn EMI edged up 4 to 444p among the Electrical leaders. Elsewhere, Telephone Rentals, a recent speculative favourite, hardened 3 to 203p, while occasional support left VG Instruments 4 up at 289p.

Seasonal considerations directed selective support towards Food Retailers. Ascoups Dairies hardened a couple of pence to 184p, as did Asda. Buying interest in response to a market short of stock lifted Hilliards 8 to 326p.

Among the occasional movements in the miscellaneous industrial sector, Gestetner A formed 4 to 68p on an unchanged price. Elsewhere, Bath and Portland, awaiting further bid developments, hardened a like amount to 281p, while revived takeover hopes lifted Plastic Constructions a couple of pence to 50p.

Further profit-taking prompted a reaction of 5 to 67p in Smiths Industries, but Reeston Clark improved 4 to 141p in response to favourable Press mention.

The Leisure sector displayed several noteworthy movements. Pineapple Dance Studios, a specialist in U.K. support, improved 16 to 90p, while Lintas, which recently pulled out of the bidding for Comfort Hotels, rose 4 to 127p. Med-Quest, a specialist in U.K. support, improved 8 more to a new high of 235p, while Reliant Motor attracted renewed speculative

FINANCIAL TIMES STOCK INDICES

Table showing Financial Times Stock Indices for Dec 24, Dec 21, Dec 18, Dec 15, Dec 12, Dec 9, Dec 6, Dec 3, and Year ago.

10 am 924.5, 11 am 924.5, Noon 925.6, 1 pm 926.0, 2 pm 926.0, 3 pm 926.0, Basis 100 Govt. Secs, 15/1/78, Fixed Int. 1928, Ordinary 1/7/75, Gold Mines 12/9/66, BE Activity 1974, Latest Index: 91-346 6025, *111-2.82.

HIGHS AND LOWS

Table showing High and Low prices for various stocks like Govt. Secs, Fixed Int., Ordinary, and Gold Mines.

S.E. ACTIVITY

Table showing S.E. Activity for various sectors like Oil Edged, Equities, and Chemicals.

Arrow hardened a couple of pence to 80p. Among components, AE were wanted at 104p, up 2 1/2. Elsewhere, a Press mention lifted Harold Perry 2 to 90p.

P.R. concern Good Relations provided the biggest shock in the short session, slumping 23p, after 22p, in reaction to adverse Press comment concerning the corporate structure reorganisation.

In the Property sector, USM-quoted London and Manchester Securities shed 1 1/2 to 5p following the share-exchange offer from Amalgamated Estates, a fraction cheaper at 3p. Bairstow Eves was quoted ex rights and shed 5 to 89p; the new nil paid shares opened at 9p premium and fell to 5p premium prior to closing at 6p premium.

Financials provided a couple of bright spots. Henderson Administration rose 1 1/2 more to 57p, still reflecting the sale of its 50 per cent interest in Far Eastern venture Henderson Baring Management to partners Bryanston and Levermore.

Improved 8 more to a new high of 235p, while Reliant Motor attracted renewed speculative

Financials mirrored the performance of Golds and gained ground where changed. Australians edged higher, in the leaders Western Mining put on 3 to 200p. Among the more speculative issues favourable Press comment attracted buyers towards Samantha which hardened a couple of pence to 6 1/4 to a 1984 high of 47p.

The short session in Traded Options was notable for persistent support of Jaguar which attracted 477 calls; the March 220's accounted for 188 and rose 4 to 12p, while the June 120's attracted 200 trades and formed 6 to 59p. Put trading featured Marks and Spencer which receded 1/2, 100 of which were done in the April 120's. Total contracts struck amounted to 1,349 - 1,036 calls and 313 puts.

NEW HIGHS AND LOWS FOR 1984

Table showing New Highs and Lows for 1984 across various sectors.

Arrow hardened a couple of pence to 80p. Among components, AE were wanted at 104p, up 2 1/2. Elsewhere, a Press mention lifted Harold Perry 2 to 90p.

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Improved 8 more to a new high of 235p, while Reliant Motor attracted renewed speculative

ACTIVE STOCKS

Table showing Active Stocks with columns for Stock, Closing Price, and Change.

LAST FRIDAY'S ACTIVE STOCKS

Table showing Last Friday's Active Stocks with columns for Stock, Last Close, and Day's Change.

EQUITIES

Table showing Equities with columns for Stock, Price, and Change.

FIXED INTEREST STOCKS

Table showing Fixed Interest Stocks with columns for Stock, Price, and Change.

RISES AND FALLS

Table showing Rises and Falls for various categories like British Funds, Foreign Bonds, etc.

"RIGHTS" OFFERS

Table showing Rights Offers with columns for Stock, Price, and Details.

RENTALS

every WEDNESDAY or SATURDAY. To advertise phone: 01-248 5284. DIANE STEWARD

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FT-ACTUARIES SHARE INDICES

These indices are the joint compilation of the Financial Times, the Institute of Actuaries and the Faculty of Actuaries

Large table showing FT-Actuaries Share Indices for various groups and sub-sections, including Capital Goods, Building Materials, etc.

FIXED INTEREST

Table showing Fixed Interest rates for British Government, 5 years, 10 years, etc.

3 All stocks 109.79 +0.02 109.77 - 2.88 15 Inflation rate 5% 3.32 3.32 3.11 16 10% 3.13 3.13 2.94

BLESMA advertisement featuring a photo of a man and woman, with text: WE, THE LIMBLESS, LOOK TO YOU FOR HELP. BLESMA BRITISH LIMBLESS EX-SERVICE MEN'S ASSOCIATION

Advertisement for The Distressed Gentlefolk's Aid Association, featuring a photo of a woman and text: -remembering the Christmas dinners she used to cook? You had never thought how empty life might be without her...

Large table showing LONDON TRADED OPTIONS with columns for Option, Calls, Puts, and various stock options.

AUTHORISED UNIT TRUSTS

Table listing various unit trusts such as Abbey Unit Trst, British Group-Corbuend, and others, with columns for name, manager, and other details.

Table listing unit trusts including British Group-Corbuend, Brown Shilley & Co. Ltd, and others, with columns for name, manager, and other details.

Table listing unit trusts including Framingham Unit Mgt. Ltd, Key Fund Managers Ltd, and others, with columns for name, manager, and other details.

Table listing unit trusts including Parquet Unit Trust Mgmt, Pacific Unit Trusts, and others, with columns for name, manager, and other details.

Table listing unit trusts including Teache, Remnant Unit Trust Mgmt, and others, with columns for name, manager, and other details.

Table listing unit trusts including Transatlantic and Gen. Serv, and others, with columns for name, manager, and other details.

Table listing unit trusts including Yeadal Managers Ltd, and others, with columns for name, manager, and other details.

FT UNIT TRUST INFORMATION SERVICE

F.T. CROSSWORD PUZZLE NO. 5,603

- ACROSS
1 Put down for an indoor game (6)
4 Purchase from bar before time (8)
9 Slovenly in duty perhaps (6)
10 Quality that needs raising? (8)
12 Confers one thousand sterling (8)
13 And 22 down: A judge's opinion, by the way (6, 6)
15 Accustomed to being employed (4)
16 See off on horseback? (7)
17 Cunning employed in any lawless state? (7)
18 No excuse for pleasure, that's certain (4)
25 I'm not one to weaken (6)
26 Well-known line in footwear (8)
28 Reputed becoming unwell? (5, 3)
29 Give acute distress in school (6)
30 Duck a 'orange'? (8)
31 Half of us on door watch (6)
DOWN
1 Press forward with debts though not genuine (8)
2 Not utilised, like a neglected barometer? (8)
3 Elementary sum I do get wrong (6)
5 Creatures with feet going in two directions (4)
6 Entitled to directions on how to turn blonde (8)

Crossword puzzle grid with numbers indicating starting positions for clues.

Solution to Puzzle No. 5,601

Grid showing the solution to puzzle No. 5,601.

Table listing unit trusts including Midland Bank Group, and others, with columns for name, manager, and other details.

Table listing unit trusts including Murray Johnsons Unit Trust, and others, with columns for name, manager, and other details.

Table listing unit trusts including National Property Unit Trust, and others, with columns for name, manager, and other details.

Table listing unit trusts including National Property Unit Trust, and others, with columns for name, manager, and other details.

INSURANCES

Table listing insurance companies and their details.

INSURANCES

Table listing insurance companies and their details.

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INSURANCES

Table listing insurance companies and their details.

INSURANCE, OVERSEAS & MONEY FUNDS

Handwritten note: "Handwritten note at the top of the page, possibly a signature or reference number." (Note: The text is illegible due to handwriting.)

Table of insurance and financial products including Liberty Life Assurance Co Ltd, National Provident Institution, and various life insurance policies.

Table of insurance and financial products including Saver & Prosper Group, Target Life Assurance Co Ltd, and various life insurance policies.

Table of insurance and financial products including C&I Investments (IOM) Ltd, British Overseas Investment Managers Ltd, and various investment funds.

Table of insurance and financial products including Midland Bank Trust Corp (Jersey) Ltd, Target Trust Mngrs (Jersey) Ltd, and various investment funds.

Table of insurance and financial products including Money Market Bank Accounts, Money Market Trust Funds, and various investment funds.

OFFSHORE AND OVERSEAS

Table of offshore and overseas investment funds including Actibonds Investment Fund SA, Fidelity International, and various international investment vehicles.

NOTES: A section containing additional notes and information regarding the investment funds and market conditions.

2 Day Management Training Programmes - Time Manager Stress Manager - time manager international

FT LONDON SHARE INFORMATION SERVICE

BRITISH FUNDS

Table of British Funds with columns for Name, Price, Div, Yield, and 1 Year % Chg.

Five to Fifteen Years

Table of funds categorized as Five to Fifteen Years.

Over Fifteen Years

Table of funds categorized as Over Fifteen Years.

Undated

Table of undated funds.

Index-Linked

Table of index-linked funds.

CORPORATION LOANS

Table of Corporation Loans.

COMMONWEALTH AND AFRICAN LOANS

Table of Commonwealth and African Loans.

LOANS

Table of Loans.

Public Board and Ind.

Table of Public Board and Ind.

Financial

Table of Financial instruments.

FOREIGN BONDS & RAILS

Table of Foreign Bonds & Rails.

AMERICANS

Table of American stocks.

BEERS, WINES - Cont.

Table of Beers and Wines.

BUILDING, INDUSTRY, TIMBER AND ROADS

Table of Building, Industry, Timber and Roads.

DRAPERY & STORES - Cont.

Table of Drapery and Stores.

ELECTRICALS

Table of Electricals.

ENGINEERING - Continued

Table of Engineering stocks.

HOTELS - Continued

Table of Hotels.

CANADIANS

Table of Canadian stocks.

BANKS, HP AND LEASING

Table of Banks, HP and Leasing.

BEERS, WINES AND SPIRITS

Table of Beers, Wines and Spirits.

CHEMICALS, PLASTICS

Table of Chemicals and Plastics.

DRAPERY AND STORES

Table of Drapery and Stores.

ENGINEERING

Table of Engineering stocks.

FOOD, GROCERIES, ETC

Table of Food, Groceries, etc.

HOTELS AND CATERERS

Table of Hotels and Caterers.

Handwritten signature: J. J. J.

Handwritten scribbles at the top of the page.

INDUSTRIALS—Continued

Table of industrial stocks including companies like British Petroleum, Shell, and ICI, with columns for stock price, bid, offer, and volume.

LEISURE—Continued

Table of leisure stocks including companies like British Airways, British Telecom, and British Gas.

PROPERTY—Continued

Table of property stocks including companies like British Land, Granada, and News International.

INVESTMENT TRUSTS—Cont.

Table of investment trusts including various funds like British American, British Overseas, and British World.

OIL AND GAS—Continued

Table of oil and gas stocks including companies like British Petroleum, Shell, and ICI.

SANYO INTERNATIONAL LTD. advertisement with contact information for London and Tel Aviv.

MINES—Continued

Table of mining stocks including companies like Anglo American, De Beers, and Anglo Coal.

OVERSEAS TRADERS

Table of overseas trading companies and their stock prices.

PLANTATIONS

Table of plantation stocks including companies like Guthrie & Co. and Guthrie & Co. (Ceylon).

FINANCE, LAND, ETC.

Table of finance and land stocks including companies like British American and British Overseas.

PROPERTY

Table of property stocks including companies like British Land and Granada.

TRUSTS, FINANCE, LAND

Table of trusts, finance, and land stocks including various investment funds.

INSURANCES

Table of insurance stocks including companies like British American and British Overseas.

PROPERTY

Table of property stocks including companies like British Land and Granada.

PROPERTY

Table of property stocks including companies like British Land and Granada.

PROPERTY

Table of property stocks including companies like British Land and Granada.

PROPERTY

Table of property stocks including companies like British Land and Granada.

REGIONAL & IRISH STOCKS

Table of regional and Irish stocks including companies like Anglo Irish Bank and Anglo Irish Insurance.

OPTIONS—3-month call rates

Table of 3-month call option rates for various stocks and commodities.

Small text at the bottom right corner of the page.

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Personal Computer News Pro-text

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Certified Accountant

“The program itself is a joy to use, and even a totally unskilled user could actually be getting serious work out of it within half an hour. Spreadsheets are particularly used for financial work... but most of them are generalised, to the point where the facilities they offer and the layouts of the worksheet are often quite unsuited to the presentation of financial figures.”
16 BIT Computing

“Compared to spreadsheets... it has a lot more power, is far quicker and easier to use and can produce first-class print-out. FT Moneywise sets new standards of user friendliness, speed, capacity and graphics capability that future financial planning packages are going to be hard put to equal, let alone better.”
Micro Decision

“It's clearly intended to produce... something that you wouldn't mind photocopying... and handing to your Chairman or an important client... I think it succeeds.”
PC User

“The ability of FT Moneywise to make reports is about the most impressive around.”
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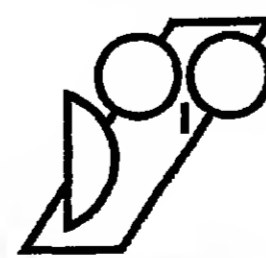
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Address _____

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Handwritten signature in Arabic script.

CURRENCIES, MONEY and CAPITAL MARKETS

FOREIGN EXCHANGES

Quiet trading

Trading was predictably quiet to currency markets on Monday. The little business seen occurred early on and was confined to a few small commercial orders. Consequently the dollar showed a small improvement and sterling also managed a small rise. Sterling's index opened at 73.4 and dipped briefly at 10 am to 73.3 before recovering to finish at 73.0 up from 73.2 on Friday.

franc at FF 11.23 from FF 11.22 and SwFr 2.575 from SwFr 2.566. Against the yen it gave the pound some comfort with longer-term domestic interest rates steadier. However, any improvement to sterling and to currency markets may not be seen until after the New Year. The dollar was a little firmer overall, helped by a few small orders during the morning. It finished at DM 3.1205 up from DM 3.1155, and SwFr 2.575 from SwFr 2.566. Against the yen it was a little firmer at ¥247.95 compared with ¥247.85. It was quoted a little lower in terms of the French franc at FF 11.23 from FF 11.22. On Bank of England figures, the dollar's index rose to 143.6 from 143.5.

£ in New York

Table with columns: December 24, Prev. close, 1 month, 3 months, 12 months. Includes forward premiums and discounts.

MONEY RATES

Table with columns: New York (Lunchtime), Prime rate, Bank funds rate, Fed funds rate, No Fed intervention.

STERLING EXCHANGE RATE INDEX

Table with columns: Dec 24, Previous, 8.30 am, 9.00 am, 10.00 am, 11.00 am, Noon, 1.00 pm, 2.00 pm, 3.00 pm, 4.00 pm.

DOLLAR SPOT-FORWARD AGAINST DOLLAR

Table with columns: Dec 24, Day's spread, Close, One month, % Three months, % Six months, % One year. Includes UK, Ireland, Canada, etc.

EXCHANGE CROSS RATES

Table with columns: Dec 24, Pound Sterling, U.S. Dollar, Deutsche Mark, Japanese Yen, French Franc, Swiss Franc, Dutch Guilder, Italian Lira, Canada Dollar, Belgian Franc.

EMS EUROPEAN CURRENCY UNIT RATES

Table with columns: Currency, Unit, % change against ECU, % change against DM, % change against FF, % change against Sfr, % change against Y.

CURRENCY MOVEMENTS

Table with columns: Dec 24, Bank of England, Morgan Guaranty, Currency, % change, % change against DM, % change against FF, % change against Sfr, % change against Y.

OTHER CURRENCIES

Table with columns: Dec. 24, Argentina, Australia, Brazil, Canada, Denmark, etc.

POUND SPOT-FORWARD AGAINST POUND

Table with columns: Dec 24, Day's spread, Close, One month, % Three months, % Six months, % One year. Includes U.S., Canada, etc.

No change

Interest rates remained steady on Monday in the London money market with trading at a bare minimum. The Bank of England forecast a shortage of around £50m and gave assistance in the morning of £8m. Factors affecting the market included maturing assistance and a take up of Treasury bills together draining £37m and Exchange transactions assistance of £17m. On the other hand there was a fall in the note circulation of £37m and banks brought forward balances £90m above target. The morning help comprised purchases of £8m of eligible bank bills in band 2 (15-33 days) at 91 per cent.

LONDON FUTURES

Table with columns: Close, High, Low, Prev, March, June, Sept, Dec, Previous day's open.

STERLING £250,000

Table with columns: Close, High, Low, Prev, March, June, Sept, Dec, Previous day's open.

20-YEAR 12% NOTIONAL GILT

Table with columns: Close, High, Low, Prev, Dec, March, June, Sept, Dec, Previous day's open.

STERLING £25,000

Table with columns: Close, High, Low, Prev, March, June, Sept, Dec, Previous day's open.

DEUTSCHE MARK DM 125,000

Table with columns: Close, High, Low, Prev, March, June, Sept, Dec, Previous day's open.

EURO-CURRENCY INTEREST RATES

Table with columns: Dec 24, Sterling, U.S. Dollar, Canadian Dollar, Dutch Guilder, Swiss Franc, French Franc, Italian Lira, Belgian Franc, Yen, Danish Krone.

SWISS FRANC Sfr 125,000

Table with columns: Close, High, Low, Prev, March, June, Sept, Dec, Previous day's open.

U.S. TREASURY BONDS

Table with columns: Close, High, Low, Prev, March, June, Sept, Dec, Previous day's open.

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CHICAGO FUTURES

Table with columns: Close, High, Low, Prev, March, June, Sept, Dec, Previous day's open.

U.S. TREASURY BONDS

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U.S. TREASURY BONDS

Table with columns: Close, High, Low, Prev, March, June, Sept, Dec, Previous day's open.

THREE-MONTH EURO-DOLLAR

Table with columns: Close, High, Low, Prev, March, June, Sept, Dec, Previous day's open.

U.S. TREASURY BONDS

Table with columns: Close, High, Low, Prev, March, June, Sept, Dec, Previous day's open.

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£ WORLD VALUE OF THE POUND

The table below gives the latest available rate of exchange for the pound against various currencies on December 24, 1984. In some cases rates are nominal. Market rates are the average of buying and selling rates except where they are shown to be otherwise. In some cases market rates have been calculated from those of foreign currencies to which they are tied.

Large table with columns: COUNTRY, CURRENCY, VALUE OF £ STERLING. Lists various countries and their exchange rates against the pound.

* Rate is the transfer market (unofficial), if New one official rate. (1) Based on same rates against Russian rouble. (2) Preferential rate for priority imports such as foodstuffs. (3) Preferential rate for public sector debt and essential imports. (4) Preferential rate for free zone for luxury goods. (5) Rate for remittances of foreign currency by Egyptians working abroad and tourists. (6) Banknote rate. (7) Rate for imports. (8) Rate for essential imports. (9) Nearly all business transactions.

Ente Nazionale per l'Energia Elettrica (ENEL) advertisement. Includes text: 'please help MHA to help the elderly in need', 'Guaranteed Floating Rate Notes 1993', 'The Republic of Italy', 'S.G. Warburg & Co. Ltd. Fiscal Agent', and a list of 'BASE LENDING RATES'.



NOTICE OF PREPAYMENT The Long-Term Credit Bank of Japan, Ltd. Floating Rate Certificate of Deposit US\$15,000,000 No. 3 BAF 00001-000030 Issued on 3rd February, 1983. Maturity 5th February, 1985.

THE MANAGEMENT PAGE

EDITED BY CHRISTOPHER LORENZ

SOUTH KOREAN car maker Young Kim shrugs: "I tried to get the passenger seats made there. But no way: the cost was much higher. I can get them here for two-thirds the price."

This sounds like the start of another sorry tale about the competitiveness of UK parts suppliers. It is not.

For while Kim is Korean, he makes his cars in the UK. And he was discussing the inability of Korean suppliers to match the prices of the British.

Kim, 46, is chairman of Panther Car Company, on which he—or rather the Jindo industrial group owned by himself and his four brothers—spent £300,000 to restructure and take receivership in 1980. Since then a new manufacturing regime has been installed, bringing together Korean and British components, and a management style introduced which owes more to Kim's respect for British workers than to traditional practice in UK industry.

This year, Panther has produced about 600 versions of the Kallista, a two-seater reminiscent of 1930s tourers, at its Byfleet Surrey base. Next year it is hoping for a return to profitability.

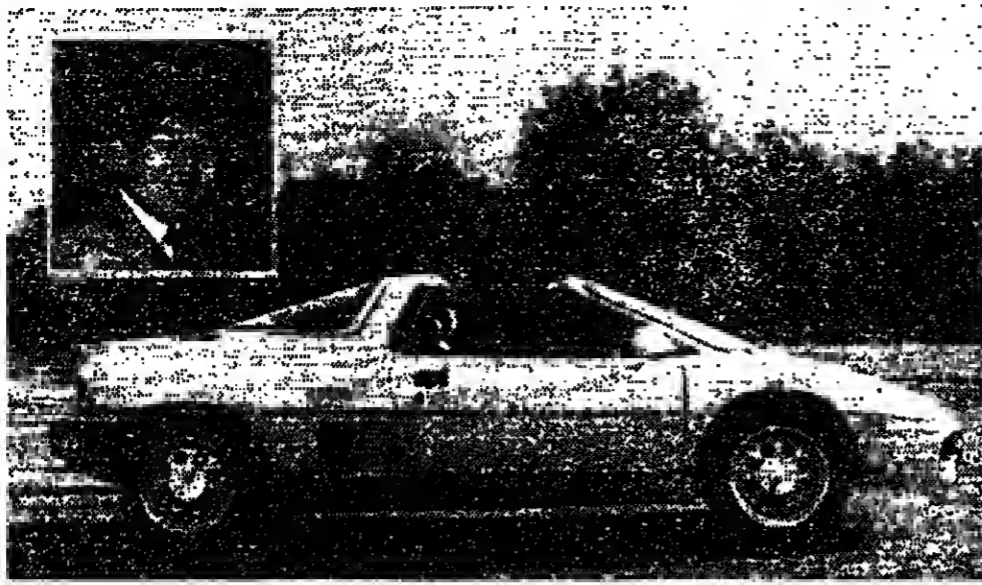
Kim's comparison of seat prices provides a partial explanation of why his foray into car manufacture is taking place in England, not Korea.

"The Koreans could not match the price because they do not have the know-how, which can more than compensate for the fact that Korean labour rates are a quarter of those in Britain (Jindo pays its Korean shopfloor workers an average of £1.60 an hour, its British equivalent is £6)."

Next year Kim will use what he sees as the "know-how" advantage to start making the planned transition from being a producer of cars appealing mainly to a nostalgic motoring fringe, to one aiming squarely at the heart of the modern sportscar market. Implicit in the move is a quintupling of output, and a further substantial increase in employment over the current 162. Only a handful of employees were called in when the receivers were called in with Panther owing about £1m four years ago.

"To the output of the Kallista will be added the Solo, a 130-mph mid-engined two-seater of dramatic, modern styling with its chassis designed by Len Bailey, one of the team which produced Ford's GT40 racing car of the 1960s.

Kim intends to take Panther from a turnover of just over £5m this year—a third contributed by a conversions and a coachwork operation which pro-



Young Kim and the Solo, his latest creation

Panther on the prowl

John Griffiths reports on a South Korean's efforts to save a UK specialist car maker

duces exotic variations on luxury cars for wealthy, mainly foreign buyers—to well over £20m a year by 1970.

This will entail calling on Jindo resources. Chassis will be made in Korea, thus exploiting Jindo's extensive metal fabricating facilities, and shipped to the UK in Jindo containers for assembly using Ford mechanicals and other parts from some 127 UK suppliers. For the American market chassis will be shipped direct from Korea for assembly.

Kim's interest in UK car manufacture stems from the obsession he and his brothers have had with "know-how" since the late 1970s.

It was while crawling through the UK in Jindo containers that he and his brothers had had with "know-how" since the late 1970s.

Kim's interest in UK car manufacture stems from the obsession he and his brothers have had with "know-how" since the late 1970s.

Kim's interest in UK car manufacture stems from the obsession he and his brothers have had with "know-how" since the late 1970s.

owner, Robert Jankel, had tried to expand the company too rapidly, with a variety of cars, and had come unstuck.

Four years of bailing the company back towards viability has done nothing to diminish Kim's respect for British expertise in being able to design, develop and put together a complex product like a car—and to supply many components sufficiently price-competitively to make the cars affordable.

But it has left him with scant respect for the UK financial sector: "what I have learned about British banks is that they are prepared to lend you money only after you no longer need it," he remarks. Indeed, the bulk of the finance for bringing the Solo to the market—including the U.S. where obtaining safety and legislative approval is highly expensive—as well as installing extra assembly plant at Byfleet is being raised in the Korean banking network.

The U.S. provides a hallmark of how seriously Panther is approaching the business—it is potentially the single most profitable market, although the most fraught with risk. In going for full certification it will have to pay \$150,000 on

the Kallista and another \$220,000 to get Solo through.

Despite all the aggravations of the long haulback from bankruptcy, and with the prospect of a return on the long investment at last having in sight, Kim is starting to feel the game may be worth the candle.

He now admits that he was "very naive about the problems." "I didn't know the connotations of the specialist car market. In the specialist business you have got to have the know-how, you've almost got to be the mechanic and you've got to have specialist designers. If I tried to move in and run Panther like a big enterprise, with managers and so on. But, in the end, everyone was looking to me to make decisions I had no idea about. Largely, it's my fault when I came here I didn't do the research into culture, work patterns, traditions, etc."

"It took two years, and a lot of turnover in personnel, to find middle management people both loyal and capable—both parties had doubts about each other's abilities. Now, at last, Panther has shown to the industry that it can produce cars and has built up some credibility. It has taken a long time to

come to terms with the habits and practices of UK shopfloor workers and middle management. "I knew nothing about the qualifications of UK employees. When I interviewed in Korea—they come; they need a job—they would not dare interview me or question my own capability. But in England, it was for me to convince them. But I did it—I wanted them to know what shape the company was in; I did not want to give them a false impression."

He was tempted to bring in Korean managers more attuned to his style of operating—but decided against it. "I realised we would have a big communications gap with the workers. Panther has no union, equally, there is also a total absence of rigid work force disciplines. Kim insists that this perception of Far Eastern shopfitters is in any case wrong. "The Korean workforce is much misunderstood—foreigners think it is militaristic on the shopfloor—in fact, it's a very open, friendly relationship with management."

If there is a difference between his Korean and UK shopfloor employees, says Kim, it's that we have real feelings for each other, which is very, very important. I wanted to start a newsletter for the company—the managers said they didn't have time, so the line guys did it. The three team leaders took me out to dinner recently, with their wives. I don't usually go, because my wife's not here. But we had a good time—even if all they want to talk about is cars."

There's a club atmosphere at the factory. The reception area after working hours sometimes resembles a coffee shop, with employees lingering for a chat. Kim has been working out where to put a piano in the place to liven up break times. He has been quite happy to let the piano be used by local associations, such as the arts society, at weekends when production is not actually in progress.

For all that, Kim confesses himself still puzzled by British middle management—"I'm simply curious about what's happening and they're my main strength—my fellaers there on the shop floor."

Perhaps, it's still a matter of time, he suggests, before all the working relationships fall finally into place. And he says, "I must know the middle management coming to take a long term view of the company—"because right now I have nothing to share with them except the future..."

A problem with planning

Robin Pauley on strategic challenges facing state industry

until he can get out of it."

John Grievie Smith follows up by stressing the need, particularly relevant in nationalised industries, for planning for uncertainty and outlining how this dictates that a variety of outcomes must always be sensitively analysed. "The immediate need is not so much to disseminate knowledge of current techniques among those operating at a professional level in the industries as to engage an atmosphere at board level in discussions with government more amenable to the consideration of a wider series of projections than the traditional one best guess" (my emphasis).

The unsatisfactory nature of the principal instrument of financial control within the state industries—the External Financing Limit or EFL—returns. Ian Byatt, of the Treasury, notes that the basic framework of government control of nationalised industries is a financial one but that EFLs cannot be a precision instrument in that framework. And Andrew Lickierman of the London Business School complains that ministers do not always understand enough about the impact of policy changes on the industries for which they are responsible.

This highlights the main problem; the difficulty of reconciling a system of public expenditure targets and controls run on a financial year by financial year basis—sometimes with mid-year revisions such as the July 1983 package of emergency cuts including an arbitrary 2 per cent of EFLs—with the concept of strategic planning over a five- or ten-year period.

For those industries destined to remain in the state sector—but with tough demands for efficiency, profits and a real rate of return on capital utilised—what is the way forward in organising

for change, assuming government will start to regard its hand-off policy as just that?

Increased competition within the public sector will clearly remain a priority and this raises a problem for both employees and management, both of which have vested interests in preserving the status quo.

As John Grievie Smith notes, the industries are at their most vulnerable when demand for their products is depressed by competition from products which are regarded as the province of another industry—coal by gas, or template by aluminium—or by the stagnation of the British economy.

Increased competition to be constructive, should surely have as a concomitant the removal of restrictions on the public sector's ability to respond, rather than additional restraints, be adds.

The difficulties of government and management trying to break out of the traditional mould of vested interest defending the status quo are graphically highlighted in the origins of the current dispute between the coal board and miners.

If there is one common theme among the variety of papers it is the need not so much for better strategic management in nationalised industries as for an environment of stability, and understanding between government and boards and agreed objectives which go far beyond the political constraints of the out-turn of each year's public sector borrowing requirement.

A more depressing impression is that while the need for change appears to be commonly agreed, the message for those eagerly awaiting it remains: Don't hold your breath.

Strategic Planning in Nationalised Industries, edited by John Grievie Smith, Macmillan, £25.

Business courses

Corporate strategy by design. Boston, January 23-25. Fee: £750. Details from Design Management Institute, 621 Huntington Avenue, Boston, MA 02115 U.S. Tel 617 232-4496. Telex: 294116.

Assessing and Improving the quality of financial services: how research can help. Zurich.

February 3-6. Fee: EFMA/ESOMAR members SWFRs 1147, Non-members SWFRs 1327. Details from ESOMAR, 7 J. Vlotstrada 29, 1071 JP Amsterdam, The Netherlands. Tel: (20) 64.21.41. Telex: 18535 smar nl.

Time planning for success. London, January 30-31. Fee: £205. Details from Peter Vero, Publicity Consultant, BIS Applied Systems Limited, York House, 198 Westminster Bridge Road, London SE1 7UT. Tel: 01-633 0968.

Quality management. Brussels.

January 14-18. Fee: Non-members BF, £5,000; Members BF, £3,000. Details from Management Centre Europe, rue Garoly 15, B-1040 Brussels. Tel: 32/2/516.19.11. Telex 21.917.

Industrial selling skills. Barks, February 4-6. Fee: £200 plus VAT. Details from RRB Drahot, Gourse Administrator, Urwick Management Centre, Baylis House, Stoke Poges Lane, Slough, Berks SL1 3PF. Tel: 0753-34111. Telex: 296 247 Urwick G.

TECHNOLOGY

EDITED BY ALAN CANE

JAPANESE FUTURE FACTORY PROJECT

Lessons in automation

BY PETER MARSH

ENGINEERS in Japan have finished work on a £40m prototype factory designed to test strategies in automated manufacturing for the 1990s.

The plant, at the Japanese Government's Mechanical Engineering Laboratory in Tsukuba City near Tokyo, will be demolished early next year after the 20 or so companies participating in the scheme have digested lessons from it. Companies working with Government technologists in the project include Toshiba, Toyota, Makino, and Kobe Steel.

The exercise has knitted together aspects of production engineering such as materials handling, assembly, computerised machining, automated test procedures and laser cutting.

Professor Keith Rathmill, head of the robotics department at Cranfield Institute of Technology, visited the plant recently. He says it should provide a proving ground on which to test theories about how to make the most of small batches in an automated fashion, in such a way that the lead times to introduce new products are kept low.

With experience from the exercise, Japanese engineers will be able to select the strategies that work, discarding the ones that lead up technological blind alleys.

The factory turns out gear boxes with the minimum of human intervention. The starting materials include simple parts such as bearings, seals and fasteners that are bought from other manufacturers. More complicated components such as casings and shafts are fashioned from law blanks and other factory hardware such as lasers.

Transfer of parts between different machines is left to a series of driverless carts, guided by wires, shuttle to and from along set pathways.

The plant is supervised by a hierarchy of computers administered by workers in a control room. According to Prof Rathmill, the Japanese look upon the factory as the result of an R and D exercise and do not try to pretend it represents what might be installed in industry.

In an assessment of the project, Prof Rathmill has split the work at Tsukuba into different sections:

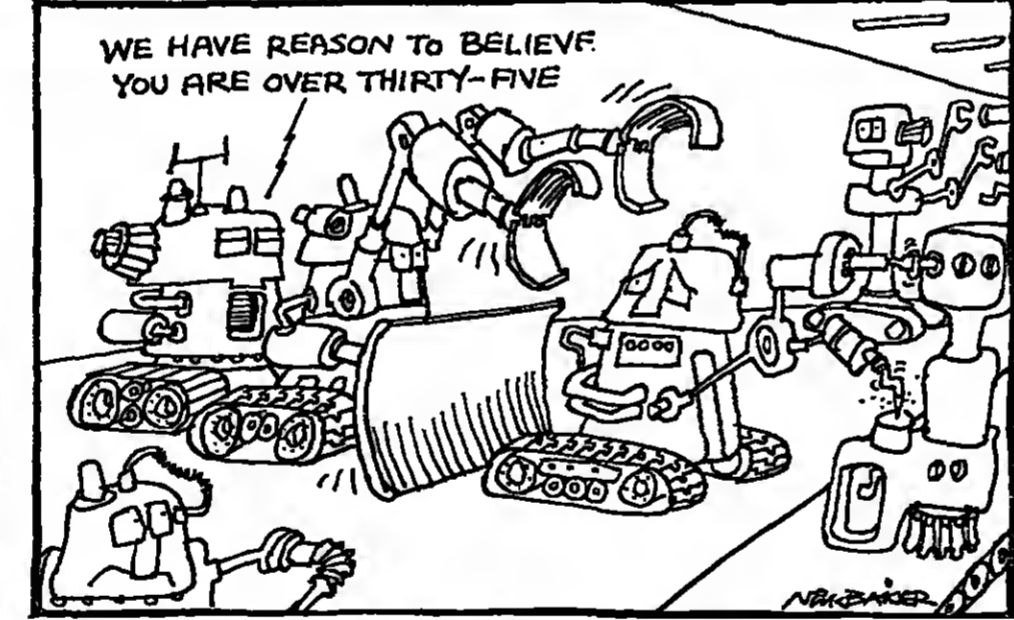
● Preforming. Activities here are at satellite locations away from the main plant. Engineers have developed automated forging machines to shape hot segments of metal into items such as tubes, discs and shafts that are fed into the main factory.

● Product design. The professor was taken aback by what he felt to be the lack of attention given to this area. There was little reference to computer-aided design. "All the answers I got (from engineers at the plant) pointed to a surprisingly simple approach in defining the parts spectrum." The workshop can turn out only a limited range of gear boxes and the professor found little link between strategies for linking the design process to production.

● Laser technology. The workshop contains a 10 kW carbon-dioxide machine for cutting and welding at one work station. A second laser, a 300W neodymium-YAG device, sends radiation that is split to three machining centres, to cut up small chips. Technicians have developed a further carbon-dioxide machine (rated at 20 kW, a particularly high power) but at the time of Prof Rathmill's visit this had not been integrated into the complex.

● Machining. As with many orthodox computerised machining centres, unmanned carts glide up to machining work stations and present raw parts to spindles. Tools then gouge out lumps from the metal in a preset fashion according to a program in the station's computer memory. The working principle is to ensure that the hardware works in a flexible fashion according to the program driving it.

The Japanese have taken this process a step further by building into their system a series of interchangeable spindles, each of which can be activated to do different cutting jobs. Prof Rathmill is uncertain on



whether this technique is commercially viable. "The overall impression of the machining cell area was one of an extremely expensive, potentially problematic density of spindles and axes of motion."

● Assembly and test. A gantry-style robot (similar to the 7505 model made by IBM) is used to assemble parts into finished gearboxes. The professor was disappointed to see no robot that was more advanced. "In assembly robots, I feel they are copped out." In the testing area, automated equipment loaded components into apparatus to measure their behaviour under vibration and other loads.

● Unmanned carts. These operate along fixed pathways, and were no more advanced than those seen in commercial systems.

● Parts marshalling. The engineers on the project have made progress in techniques to organise the flow of raw material.

PROFESSOR Keith Rathmill bases much of his work at the Cranfield Institute of Technology in building up links with industry.

As the head of the Institute's robotics and automation group, the 37-year-old professor is in charge of about 50 staff and 75 students. Some 70 per cent of the group's annual income of £1.5m (which covers both research work and teaching) comes from industry. The group also gets cash from the Department of Education and Science to help with training. The robotics unit links up with companies in two ways:

● It runs one-year MSc courses in subjects concerned with automation. Three courses, in flexible-manufacturing systems, robotics and advanced-manufacturing technology, are between them training about 60 people a year. Most of these individuals are engineers in their mid 20s who are sponsored by companies for which they are already working.

● Staff at the unit do research for industry in specific technical areas. Students on the courses (besides those training for an MSc, the robotics group has a number of people studying

for three years for PhDs) help out. Prof Rathmill says that to run a successful teaching operation in industrial technologies it is vital to organise a concurrent research effort in work that is commercially relevant. The Cranfield group is working with Texas Instruments on relatively cheap flexible manufacturing systems that cost no more than £500,000.

Prof Rathmill says that UK industry has generally been positive about supporting his unit and sees "positive growth and interest" in Britain in high-technology manufacturing.

UNIVERSITY RESEARCH

Lasers for medical treatment

A SIMPLE machine developed at a university laboratory with the help of the Ministry of Defence promises to extend the lives of a new and promising form of laser.

Gas purifiers for excimer lasers were developed at Oxford University's Clarendon Laboratory in the late 1970s. The lasers produce blasts of high energy and have a variety of applications from medicine to electronics.

Oxford Lasers, a small company formed by people at the laboratory, is selling the purifiers to manufacturers of excimer lasers that want to make their products more useful in industry.

Oxford Lasers has sold 60 of the devices and is expanding rapidly—in the past nine months its staff has doubled to 18.

The gas purifiers use cryogenic techniques to get rid of contaminants. They strike at a problem that dogs users of excimer lasers. The lasers use highly reactive fluoride compounds which are easily contaminated. As a result, the power output of the machine may fluctuate. In an industrial process, workers would have to replace continually the lasing materials, a time-consuming and expensive operation.

With the gas purifier, says Oxford Lasers, lifetimes of the lasers can be increased by a factor of 10 or more. The company is selling its machines to several manufacturers of excimer lasers, among them Questek and Sopra of the U.S., Lumonics of Canada and Lambda Physik of West Germany. The gas purifiers cost some £4,500, roughly 10 per cent of the total for an excimer laser.

Excimer lasers have created interest because they emit pulses of light at relatively high energy. The wavelength of the radiation is in the ultra-violet region at around 200 nanometres.

With the machines engineers can channel high-energy photons at materials, for example to remove selectively fragments of a surface coating.

The devices show particular promise in chip manufacture. Researchers are examining applications in removing layers of chemical resists built up on a semiconductor substrate. This is a key part of the lithography

process used to produce circuit elements.

In conventional chip making, engineers use ordinary ultra-violet light. With the high-energy radiation from the excimer laser, workers may be able to create circuit patterns in finer detail and at higher speeds.

They may also be able to dispense with the development process that is usually required to remove parts of the chemical resist after irradiation with light. With the laser, redevelopment may not be needed—the beams are of such high energy that the segments of resist are simply blasted away.

Excimer lasers are also under investigation in other areas of industry and in medicine—where they could be useful in eye surgery.

In excimer lasers, streams of gases are passed into a tube. The materials usually include fluorine and rare gases such as argon and krypton—these combine to give a rare-gas fluoride. Electrons, through the mixture via electrodes, stimulate emission of photons which leads to the laser radiation.

As fluorine is so reactive, it combines with traces of elements such as silicon, carbon and sulphur that may be present in the tube—for example as part of the electrodes. The productions of such reactions contaminate the rare-gas fluoride, decreasing the power output of the machine.

In some cases, an excimer laser may produce radiation for only half an hour before the cases have to be replaced. To purify the rare-gas fluoride chemically would be very difficult. The substance would react with any chemicals introduced into the tube, producing more contamination.

Oxford Lasers turned to a straightforward cryogenic technique developed during work for the Ministry of Defence (which is interested in excimer lasers because of their possible military applications).

At this temperature, the rare-gas fluorides remain gases—but virtually all the contaminants freeze. The fluoride can be channelled back to the laser tube by closed loop, while the impurities are removed periodically as a solid sludge, just as someone would defrost a refrigerator.

YOUR CHECK LIST FOR HIGH TECH FUTURE WORKING

- CAD/CAM
- Robotics
- CNC Machining
- CNC Milling
- CNC Drilling
- CNC Grinding
- CNC Turning
- CNC Boring
- CNC Tapping
- CNC Reaming
- CNC Honing
- CNC Polishing
- CNC Deburring
- CNC Finishing
- CNC Coating
- CNC Painting
- CNC Welding
- CNC Soldering
- CNC Brazing
- CNC Cutting
- CNC Drilling
- CNC Milling
- CNC Turning
- CNC Grinding
- CNC Boring
- CNC Tapping
- CNC Reaming
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- CNC Painting
- CNC Welding
- CNC Soldering
- CNC Brazing
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Medicine

Watchdog computer

FOR LESS than £6,000, doctors can buy a computer system which gives patients details of preventative care. Running on the IBM XT computer, the system from Update Computers produces a list for the doctor showing for each patient visiting the surgery that day all overdue items of preventative care.

The system was developed by Drs Michael Whitfield and Stan Shepherd and Update. Dr Whitfield has had an Update system in his Bristol practice since last year.

Offshore

Explosive cutters

BRITOL has taken delivery of explosive cutters to protect pipelines connected with the Brent A platform from accidental damage.

The devices, said by the supplier, Honeywell Lesfield, to be the world's largest explosive cutters, are fitted to a gas pipeline linked to the platform. The cutters would automatically sever the line if a ship's anchor or other marine obstruction hooks the structure and exerts a force of more than 2 tonnes.

Banking

Foreign dealing

Barclays International Rates Display System for the bank foreign exchange dealing room has recently been completed by Legica. The system is used by more than 100 dealers each of whom have two screens which monitor a combination of Barclays' internal exchange information, and external services such as Reuters and Dow Jones.